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ABSTRACT

Findings are presented from a 1-year planning study of independent living for severely physically disabled persons. Funded by a federal grant through the city and county of Denver, the study focuses on the following 10 necessary services (with subtopics in parentheses): income assistance (subsidies and typical expenditures), attendant care (recommendations for long-term solutions and a sample budget for a cluster client), medical services (health insurance and health planning), counseling (the effects of the 1973 Vocational Rehabilitation Act), transportation (the Urban Mass Transit Administration), education (mainstreaming), employment (architectural and psychological barriers), recreation (active vs. passive involvement), housing (financing and detailed design standards), and legislation (antidiscrimination laws). Each chapter lists specific recommendations. The report also contains results of two surveys concerning the disabled population of Denver. Among four appendixes is the format of the needs assessment survey. (CL)

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INDEPENDENT LIVING FOR THE PHYSICALLY DISABLED

U.S. DEPARTMENT OF HEALTH,
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Atlantis Community, Incorporated
Denver, Colorado
1976

EC093190

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ABSTRACT

This report contains the findings of a one year planning study on independent living for severely disabled persons. It was sponsored by an $80,000 Housing and Community Development Act grant from the Department of Housing and Urban Development. Atlantis Community, Inc., a non-profit self help organization of disabled and able-bodied persons, received the grant through the City and County of Denver and carried out the study stressing extensive consumer input.

The report is founded on the basic assumption that most young severely disabled individuals do not want to live in nursing homes or institutions, and when assisted by comprehensive supportive services, the disabled can live independent and productive lives. The necessary services include: Homecare Assistance, Income and Expenditures, Medical Needs, Transportation, Education, Employment, Counseling, Recreation, Legislation, and Housing including design, rehabilitation and financing.

In addition to research and analysis of each service area, recommendations are made to various agencies for implementation of better services.

The material contained in this report may be quoted freely provided that proper acknowledgement is given to Atlantis Community, Inc.

ACKNOWLEDGEMENTS

Many people have helped to create this report, and we are indebted to all of them, those who initially pushed for such a study, those who guided us into productive directions, and those who actively participated in the research and the writing.

Special thanks to Steve Campbell, the first Secretary-Treasurer of Atlantis, Mike Smith of the Community Design Center, and Ingo Antonitsch of the Mayor's Commission on the Disabled, who in 1974 threw their support behind the planning concept, wrote the first proposal, and represented Atlantis before the Community Development Administration. Ingo also deserves our thanks for loaning us his office and staff for our first month of operation. Wade Blank and Glenn Kopp, the co-directors of Atlantis, receive our gratitude for their steady support and their confidence in our ability to do the work. Thanks also to the various agencies of the City and County of Denver who, after initial trepidations at working with outsiders, established a good working relationship with us. Among them we single out Central Services and its Director, Howard Linder and the Accounting Staff of the Department of Social Services. International Business Machines Corporation gets our salute for lending us Berthold Lippel for one year.

Within the office, we owe a special thanks to Cheryl Presley, our office coordinator/secretary who put up quietly with fifteen people going in fifteen directions at once.

Ruben Valdez, the Speaker of the Colorado House, took much time out of his busy schedule to give us encouragement and guidance into the complexities of the legislative process. Royal Edgington, of the Denver Department of Social Services, gave help and advice especially in the beginning and showed us what capable bureaucrats can be like.

Our two consultants, Bernie Jones and Peter Orleans, brought a high degree of experience and flexibility to their part of the project. Also, we sincerely appreciate the unnamed persons who willingly submitted to our extensive interview and helped document what the true needs of the disabled are.

We could go on and on and still not exhaust the list of people who helped the cause. We thank all of you, you have not been forgotten - we could not have done it without you.

The Senior Planning Staff

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Chapter One Background of the Atlantis Report

HISTORY

When the average person thinks of nursing homes, he/she is inclined to think of the aged and the infirm. Few realize that our nation's institutions also house a great many disabled young persons, some in their early teens. These are the victims of our society's response to children and young adults who have muscular dystrophy, cerebral palsy, birth defects, blindness, neurological disorders, or have survived accidents of varying kinds. But they are there, by the thousands, many simply because they were labeled by physicians and psychologists as 'retarded' and unable to function 'normally'. It is difficult to imagine a more stifling or inappropirate atmosphere for a young person. It is inhumane to shackle and imprison youthful energy and curiosity into the nursing home routine. Such repressive living leads to anger, hostility, and finally to the withdrawal and waste of a battered ego.

Atlantis, which consists of an ever growing number of disabled persons and able-bodied allies, has recognized this problem and sought solutions. A strong core group of lay people, nurses, therapists, physicians, lawyers and local government officials has been assembled to challenge the traditional segregation of the disabled population. The movement grew out of an attempt in late 1973 to establish a progressive program in a Colorado nursing home. The program, which was to a large degree successful, was designed to provide normalizing educational and recreational experiences to the institutionalized young. It soon became apparent that the primary struggle was not in lending growth experiences to the clients, but in fighting the paternalistic tradition and profit orientation of the nursing home industry.

On June 1, 1975, a most significant step was taken toward achieving the goal of alternative living situations. A number of public housing units were leased in the Las Casitas Homes development in west Denver and the first seven disabled residents were moved out of nursing homes and into their own apartments. To meet the attendant needs of the residents, a 24 hour per day staff was hired and trained in both medical areas and domestic routines. All community residents were supplied with a phone and a Hotline was created to monitor calls, dispense staff and information, and respond to emergencies. Thus the Atlantis Community was born and named after the lost continent to symbolize the emergence of 'lost' persons once again in the world. The philosophy of Atlantis is that the disabled population can become an active, productive portion of society if given the chance to participate in the society. Programs at Atlantis include teaching residents how to manage an apartment, how to be consumers, and how to meet their own social needs. Attendant assistance is always available for physical necessities and to aid with heavy work. The nuclear community functions as a half-way house until the individual feels equipped to deal with society at large.

The Atlantis Community, after a year of operation, has emphatically fulfilled the expectations of its originators. The community has grown from seven residents to seventeen residents at the nuclear community, and ten outreach members where clients live by themselves in the community and use Atlantis services.

THE PLANNING PROJECT

Conceived in late 1973, the idea of researching the needs of the disabled grew in the minds of some members of Atlantis. They enlisted outside expertise, drew up an initial program description and submitted the document to the Community Development Administration for consideration as a citywide project. After several months and many meetings the Atlantis planning project was approved in February, 1975. The project was funded for the calendar year 1976 beginning January 1st.

The major problem with the Atlantis Planning Project was its lack of precedent. It was a federally funded project initially approved and later administered through the City and County of Denver and operated by a non-profit corporation with much of the work carried out by disabled persons. Contracts were drawn up, signed and then torn up which was followed by head scratching, memos, phone conversations and meetings. Eventually procedures were worked out, between the City and Atlantis, perhaps not the most efficient, yet they provided lighter moments as we critiqued other bureaucratic systems with a skeptical eye while wrestling with our own. No less than four city agencies in addition to our own accountant were involved in the financial aspects and signed off on all payment vouchers.

There were many apprehensions about the project because basically most people did not understand what we were, much less what we were going to do. It was more an educational gap than anything. For some people our project meant preliminary architectural work for a 100 unit high rise apartment building and nothing more, while for others, it was just a survey and analysis of existing services for disabled persons.

Our approach to the problem took into account the basic premise on which Atlantis stands. This is that disabled persons should be able to live the most independent life they desire, accompanied by the support services to make it possible. In other words our job was to look at all of the facets which affect a disabled person's lifestyle, analyze them and then design ways to help make independence more of a reality.

We knew when we began that we would only be scratching the surface and that there were volumes of information about coping with handicaps. Fortunately, early in our year's work we acquired a copy of the Comprehensive Service Needs Study, prepared by the Urban Institute in Washington D.C. This report, dealing initially with Vocational Rehabilitation but branching out into independent living, considers the nation as a whole and addresses the same problems we are facing locally in Denver. Mostly because of this document we didn't, nor did we ever intend to, reinvent the wheel. We only want to readjust it to fit Denver.

Like many before us engaged in large research projects, the planning staff had to wrestle with the complexities of covering broad subject areas, explaining the intricacies of each, and then coping with the interaction among the subject areas. As was stated in the Urban Institute's Comprehensive Needs Study, "In a given time frame with a given set of resources, one can go broad or deep but not both." Atlantis opted for a compromise of sorts, using extensive research in key areas, yet not ignoring others of a lesser priority.

Staffing

The people who worked on this project were unique in many ways. The initial budget only allowed enough funds for two senior staff planners, three full time planners who would be disabled persons and an office coordinator/secretary. The Atlantis Board of Directors hired John McCuskey as the Senior Planner and project administrator, and Barry Rosenberg as the Social Planner. Both are able-bodied and were hired for their positions because of their background in planning and their understanding of disabled problems. An additional Senior level Planner was obtained when Berthold Lippel, who normally works for the IBM Corporation, secured a leave of absence for one year and joined the staff in the medical area.

Many factors were an influence in deciding to hire more disabled persons than just the three planners indicated in the original budget. Among them was the fact that there were many qualified disabled persons who could not obtain gainful employment because of discrimination. Another is the fact of life for a disabled person that he or she must either make a lot of money to pay for livng expenses or make only a small amount so as to avoid losing public financial assistance. If a severely disabled person earns more than $65.00 per month, he or she faces the loss of several assistance payments including SSI (Supplemental Security Income) and Medicaid. And a third reason for hiring disabled planners is that most research documents filter from the top, down. We wanted this one to go from the grassroots, up. Because of this, Atlantis hired fourteen disabled persons at the maximum amount they could earn each month without losing their other benefits. Employment announcements were sent to many places serving the disabled such as state employment offices, vocational rehabilitation offices, private agencies, colleges, and universities, to which there was a tremendous response.

After an in depth interview and selection process, people were hired for specific jobs and study areas and worked in one of three areas of concentration. These were: the Physical Planning Team under John McCuskey, the Social Planning Team under Barry Rosenberg or the Medical Planning Team under Bert Lippel. For some, work experience by itself was new and unique. For others the research and planning was a fresh experience while a few were already familiar with the methodology employed. By itself the nature of the work was abstract and required skills in research, deduction, self motivation and discipline. Coupled with new people and personalities, finding out that one's disability was an asset to employment rather than a detriment, as well as handling deadlines and responsibilities resulted in new experiences for most. Some developed strategies for coping with insecurities, and a few got lost in the nebulous world of pressures in deadlines and freedom in research.

As the year progressed and the staff became familiar and at ease in their assignments, several individuals showed indigenous leadership capabilities and ambitions. At this time, in keeping with the philosophy of Atlantis, a management council was formed composed of the three team leaders and four disabled members of the staff to act on budget and personnel issues.

Some staff members pulled double duty such as Larry Wilkins, who not only was a physical team planner in the architectural field but also the accountant and principal financial management advisor for the project. Melvin Conrardy, who never had a regular job before in his life, turned out to be one of the most productive, hardworking and likeable people on the staff.

In two areas, we knew we did not have the expertise on our staff to deal adequately with the problem. One was in architectural design, the other was in obtaining the best possible documentation of disabled needs. To overcome these obstacles and after interviewing several firms we retained Morris Architects and Social Change Systems to assist in our project. Peter Orleans of Morris Architects, with a Ph.D. in Sociology and an M.A. in Architecture and Bernie Jones of Social Change Systems, Ph.D. in Sociology, more than rose to the occasion and far exceeded the contract demands.

The work has been arduous, repetitive, physically and emotionally fatiguing and in many ways like groping for something while wearing a blindfold, yet what we have is different from traditional planning documents. It is a study put together with a majority of disabled input on problems affecting those same disabled persons. It is our hope that eventually most government decisions affecting the disabled population will be made by disabled persons without sterotyped or third hand information. Those in decision-making-positions now affecting the disabled, take note! This report is coming from the grassroots and from the very people whose lives you now manage.

The people involved in this study over the majority of the project in alphabetical order are as follows:

Linda Chism - Social Team, Legislation
Robert Conrad - Social Team, Counseling
Mel Conrardy - Medical Team, Financial Income and Payments
Max Dominquez - Custodian
Carolyn Finnell - Social Team, Education
Suzanne Janda - Physical Team, Architecture
Don Johnson - Physical Team, Housing Finance
Bert Lippel - Medical Team Coordinator, Medical Needs, Income, Homecare Services
John McCuskey - Physical Team Coordinator and Project Administrator
Roger Moore - Social Team, Transportation
Nancy Pesusich - Social Team, Recreation
Cheryl Presley - Office Coordinator
Barry Rosenberg - Social Team Coordinator
Leeba Simon - Project Research
Marty Sutherland - Social Team, Transportation
Susan Sutherland - Medical Team, Homecare Assistance
Bud Thompson - Social Team, Employment
Larry Wilkins - Physical Team, Architectural Design and Project Accountant

Consultants -

Architects - Peter Orleans, Morris Architects, Denver

Needs Assessment and Market Survey - Bernie Jones, Helen Miles, Social Change Systems, Inc., Denver

Graphics - Bertram H. Marsh, Marsh Graphics

Definitions and Parameters

The definition of a 'severely disabled person' for the purposes of this study was our first problem in methodology. We surveyed the current literature, and drew back in fear before the semantic jungle that we found. On the one hand were the 'generous' definers, whose all encompassing definitions made half the population of the U.S.A. disabled, and who even include pregnancy as a temporary disability. On the other hand were the 'stingy' definers, who qualified and nibbled away at definitions until the group described became small but manageable.

The discouraging fact is that the federal government alone manages over 85 programs serving the disabled, and as far as we could tell, no two programs use the same definition of disabled or severely disabled.

The Urban Institute's 'Comprehensive Service Needs Study' has made an extensive analysis of the problem, reviewing the major efforts of past definitions, and bringing activity measurements such as the 'Barthel' scores into the picture.

After reviewing the many definitions, and coming to grips with the difficulties of even gathering local statistics about disability and severity levels, we made the decision to be as pragmatic as possible. We chose a simple definition, one as close as possible to the sample of disabled people with whom the Atlantis project started over two years ago.

The definition, simply stated, says that our concern in this study is with severely disabled individuals: A severely disabled individual for our study is an individual between the ages of 12 and 60 who is dependent on a wheelchair or confined to a bed, and/or who needs assistance with the activities of daily living (ADL)'.

Originally, the age span was defined from 18 years on up, but occasionally there are found children as young as 12 years in institutions and nursing homes, and we did not want to reject any data about such cases. Similarly, the upper limit of sixty was selected to differentiate between adult and geriatric statistics. In actual practice, the group of disabled that Atlantis is working with range from age 16 to the mid-thirties.

One other dimension is the geographic areas in which the disabled of our definition live. For most purposes, we have confined our research to the City and County of Denver, because this was the target area of our grant. In practice, we could not ignore the remainder of the metropolitan areas, because many institutions are located in the suburbs. For example, the relatively strict regulation of nursing homes in the city of Denver has caused a large concentration of nursing homes in suburban areas with more attractive zoning laws.

Scope of the Report

There is a new movement among the disabled today. If a day's history of the life of a typical quadriplegic is depicted, no matter how dry or factual, it usually conjures in the reader's mind feelings of sympathy and pity. In themselves these emotions are not necessarily bad, but for what we are attempting to convey in this document, they are out of place.

The material in this report is designed for the person who may know a few things about disabled lifestyles or work in some area affecting disabled individuals. Our goal is to explain the interdependency of events within that lifestyle. Simple daily function in an able-bodied person's life become time consuming problems for the disabled. These problems are tightly knit to one another and form an inter-connecting network that stretches from the beginning of the day to its end.

When one becomes disabled or makes the effort to break the ties of family of insititutions, life can take on the feature of being terribly simple and at the same time awesomely complex. It can be silently lonely, yet without privacy.

One is suddenly in a wheelchair, unable to move one's leg or hand that can still be touched and looked at. Does paralysis mean automatic helplessness? No, but none the less, there are new features in a new lifestyle that must be dealt with. One of man's basic requirements is shelter. This is a traditional and still a major obstacle to independent living that has leaked to the outside world. Small items make big differences, such as one step or one curb or a doorway three inches too narrow. Just by sitting in a wheelchair one's choices are limited.

Daily living activities such as getting in and out of bed, dressing oneself, performing toilet functions, cleaning up and cooking and preparing meals must be done or assisted by an "attendant." Attendants at times are a necessary evil. They are usually overworked and underpaid, and quite often in one to one situations they don't last more than a few months.

Other ingredients in everyone's daily existence are food, clothing and rent for shelter. How does a disabled person take care of him or herself? Usually money comes from some form or combination of public assistance. Rent subsidies, SSI and SSA checks all form a maze in the bureaucratic jungle called welfare. For those lucky enough, there is the possibility of work. Even if a disabled individual can sneak through the massive doors of discrimination he or she is still not at first base. A good education usually leads to a good job. But if one was disabled early in life chances are that he was educated in the backrooms of society. "Special schools" is another term for segregated or hidden schools. When teacher expectations are low and the thrust is directed toward vocational or workshop employment, self esteem is low and young disabled persons are programmed as second class citizens. To get a job, one needs a sound preparatory education and skills and despite the sermons on radio and televison saying, "Hire the Handicapped," not much really happens for the severely disabled.

Some psychological barriers are raised by the very people that supposedly are there to help the disabled. Counselors and caseworkers are given arbitrary and very subjective powers over a disabled individual's life. Opportunities for employment in a new field or the chance to achieve higher education are literally controlled by vocational counselors.

To hold a job, one needs transportation. The grand total of public buses in Denver serving the disabled is twelve and those can only hold four wheelchairs each. The alternative is paying rates that approach piracy level from private companies who make most of their money from Medicaid dollars.

Sooner or later all of these struggles tend to wear anyone down and out emotionally and mentally. Who is to help? Generally there is a counselor with little or no knowledge of the complexities of disabled lifestyles.

The culmination of these factors is that it is not enough to solve just one of the problems in isolation from the others. They are like a chain. All of them must be addressed simultaneously for progress to be achieved.

The following ten chapters concern these specific areas. They are succeeded by a section on Denver area agencies and then the results of an extensive survey by Social Change Systems, Inc. Finally, there is a section devoted entirely to key recommendations, followed by the appendix and bibliography.

28.43
Marsh '78

Income & Expenditures

Chapter Two   Financial Income and Expenditures

"There are many programs in existence, but they are run by the wrong people."

INTRODUCTION

The majority of severely disabled people derive their income, either in part or in total, from one of the many public assistance programs run by the federal, state, or local governments. Work, as a major source of income, is infrequent either because the severity of the disability prevents it, or at least prevents the effort of a full 8-hour day. Also, the fear of losing valuable medical benefits because of work earnings often keeps the disabled from securing employment.

A great variety of assistance programs originate in many government sectors and levels. Each runs by its own rules of eligibility, benefits, and acceptable cross-benefits. Research on this project has uncovered 18 programs which funnel money to the disabled individual. To keep this section down to manageable size, we have summarized and discussed here the half-dozen major programs that are of importance to probably all the severely disabled. Detailed information about these and other relevant programs has been collected and summarized in the Appendix.

INCOME PROGRAMS

The programs can be divided into four categories:

1. Income for living expenses: This is money in the form of cash grants earmarked for the basic daily living expenses such as rent and food.
2. Subsidies: These are programs that subsidize certain specific categories of income, such as rent and food.

3. Homecare allowance: These payments are dependent on the level of a person's disability and are intended to help meet the need for homecare.

4. Medical benefits: These are programs that reimburse part or all of the medical expenses of the disabled.

Income for Living Expenses

The state of Colorado has set a so-called 'Maximum Level of Income". This is the amount that the state considers necessary in order for a person to live in a minimal, survival way. Currently, the 'Maximum Level of Income' is set at $185.00 per person per month. This amount is derived from four sources:

1. The U.S. Government contributes $167.80 in the form of Supplementary Security Income (SSI). SSI is a federal program providing income for the aged, the blind, and the disabled, who have little or no income resources. SSI requires a person to have physical or mental impairment preventing him from performing any 'substantial gainful activity'. SSI will also supplement other unearned incomes up to the state Maximum Level of Income of $185.00. People with unearned income above $185.00 are not eligible for SSI. A recipient of SSI can earn up to $65.00 per month and not lose any SSI. Earned income above $65.00 is deducted from the SSI check, at the rate of $1.00 for every $2.00 earned, above the $65.00.

2. State and county governments contribute a "Colorado Supplement" (CS) in the amount of $17.20. The state contributes $13.76 (80%) and the county $3.44 (20%). This supplement is part of the state/county assistance program called "Aid to the Needy Disabled" (AND) which also finances an attendant care allowance (to be described later on).

3. The Social Security Administration (SSA) has a program of Disability

Insurance (DI) benefits. To be eligible for DI benefits, a worker must have enough work credits (at least 18 months) and be disabled for at least twelve months. How much DI benefit a person receives is determined by how many work credits he has accumulated, and by how much money he has paid into Social Security.

Dependents are eligible to receive Social Security benefits upon retirement, disability, or death of an employed parent. Children under 18 and up to 22 years old are eligible if they are full-time students. A wife or a widow is eligible if she has children under 18 years of age in her care. A child disabled before the age of 22 and unmarried is eligible at any age; a wife or a widow is eligible at any age if she has a disabled child in her care.

The amount of DI benefits a person receives if disabled before 22 is 75% (if parent is dead), or 50% (if parent is alive) of what a parent will receive upon retirement, disability or death.

4. Workmen's Compensation Insurance provides income and medical coverage for a worker injured on the job. The amount of income is determined by the person's income at the time of the injury. Maximum compensation a person can receive is $144.00 per week. If an individual receives SSA-DI benefits, his Workmen's Compensation income is cut 50%. He then receives both DI and Workmen's Compensation income.

5. Colorado Vocational Rehabilitation has a variety of programs resulting in income to the disabled. The goal of all programs is to help a disabled person become financially independent through employment. If a person's disability prevents future employment, he/she may not be accepted by Vocational Rehabilitation. This is a subjective decision made by a counselor.

In addition to providing vocational fees, tuitions, transportation, and so on, Vocational Rehabilitation also supports the disabled via living and maintenance payments, which are always temporary until the person can complete his rehabilitation. If Vocational Rehabilitation payments exceed the Maximum Level of Income, the person is not eligible for SSI and AND.

Subsidies Programs

1. Rent Subsidy

Rent subsidy, also known as 'Section 8, is a program administered by the regional and area offices of the Department of Housing and Urban Development (HUD) and local housing authorities. The program subsidizes rent for low income people. Thus a low income person pays no more than 25% of his gross income for it. This is further explained in the section of the report on Housing.

2. Food Stamps

The federal Food Stamp program subsidizes the purchases of food by low income people. All people whose income and resources do not exceed the Food Stamp Program's requirements are eligible. The cost of a monthly allotment of Food Stamps is based on the amount of income that remains after all deductions have been made.

Homecare Allowance

The homecare allowance is a support program of the state of Colorado which provides completely and permanently disabled persons with funds for attendant care. This is a component of the Aid to the Needy Disabled (AND) program mentioned previously. It is paid in its entirety by state and county funds. The maximum allowance is $217.00 per month, of which the state contributes $173.60 (80%) and the county $43.40 (20%). The precise amount of the allowance depends on the amount of attendant care needed by a disabled person, and the amount necessary is certified by a doctor. Only recipients of SSI are eligible for homecare allowance. Note that the "Colorado Supplement" to SSI and the homecare allowance come to the recipient in the form of one "AND" check. For example, if the Colorado Supplement is $17.20, and the maximum homecare allowance is $217.00, the disabled person receives one "AND" check for $234.20.

Medical Benefits

1. Medicare

Disabled people under the age of 65 are eligible for Medicare after they have received Disability Insurance (DI) benefits for 24 months. The program consists of two parts:

Part-A, which is essentially hospitalization insurance, and which is paid from contributions to Social Security, and

Part-B, medical insurance used for doctor fees. This is paid for in monthly premiums of $7.20 per month.

Summary of Benefits

PHYSICIANS - Medicare does not pay for routine examinations. For treatment of an illness or injury - medicare pays 80% of a "reasonable" charge after the yearly $60.00 deductible.

HOSPITAL - Medicare pays 100% after the $124.00 deductible for the first 60 days. From the 61st day to the 90th day, Medicare pays all but $26.00 a day in each benefit period. This falls under Part-A. However, Part-A does not pay the doctor while a person is in the hospital. Part-B pays 80% of a "reasonable" charge of a doctor's fee.

CLINICS - Medicare does not pay for routine examinations. For illness or injuries, however, it will pay 80% of a "reasonable" charge.

DENTAL CARE - Medicare does not pay for routine dental care.

OPTOMETRIC CARE - Medicare does not pay for routine eye care.

PODIATRY CARE - Medical conditions affecting the limbs do fall under Medicare benefits; routine care does not.

HOME HEALTH CARE - Part-A pays for 100 home visits per year, but only after a three day hospital stay. Part-B pays for 100 home visits a year without a three day hospital stay.

DRUGS - Drugs do not fall under benefit, unless a person is hospitalized.

REHABILITATION HOSPITALS - Coverage is the same as in another hospital.

REHABILITATION CLINICS - 80% of all resonable charges.

OUTPATIENT CLINICS - 80% of all resonable charges.

EMERGENCY CARE - 80% of all reasonable charges.

PHYSICAL THERAPY - Covers independent physical therapy in the office or in a person's home, Part-B pays 80% up to only $80.00 a year. When a person receives therapy from a Home Health Agency, Part-A pays for 100 home visits a year. Part-B covers 100 home visits a year.

OCCUPATIONAL THERAPY - If a person receives physical or speech therapy from a Home Health Agency he is eligible for occupational therapy benefits.

SPEECH THERAPY - A person can receive speech therapy from a Home Health Agency.

PROSTHESES AND APPLIANCES - Part-B helps pay for colostomy or ileostomy bags, for artificial limbs and eyes, for arm, leg, back and neck braces and orthopedic shoes if they are part of the leg braces.

DISPOSABLE MEDICAL SUPPLIES - No benefits.

LONG-TERM CARE FACILITIES - A person must spend at least three days in a hospital. Medicare then will pay for all covered services for the first 20 days; from the 21st day to the 100th day, Medicare pays all but $13.00 a day in each benefit period.

2. Medicaid

Medicaid is a state administered program, financed in large part by the federal government. It provides medical care coverage for low income people on public assistance. All persons receiving the Supplemental Security Income (SSI) are eligible for Medicaid, i.e. the recipients of Aid to Dependent Children (ADC), Aid to the Blind (AB), Old Age Pension (OAP), Aid to the Needy Disabled (AND), are all covered by Medicaid. An interesting experimental addition to Medicaid eligibility and benefits is currently under development and being administered through the Atlantis Community. This system was developed with the help of the Colorado Department of Social Services, and allows Medicaid assistance outside of a nursing home by using a "Medicaid Provider Number". This provider identification lets Atlantis act as a "Medicaid Provider" and be reimbursed up to $107.00 per client per month for medical services performed by the Atlantis attendant staff. This procedure goes into action whenever the homecare allowance is insufficient to cover the attendant needs of the disabled client, and brings the government expenditure per disabled person closer to the level current in nursing homes.

Medicaid Benefits

PHYSICIANS - All Medicaid benefits are paid 100%.

HOSPITALS - 100% payment

CLINICS - 100% payment

DENTAL CARE - (EPSDT) Early Periodic Screening, Diagnostic and Treatment -

Provides for screening and follow-up screening examinations and care for eligible recipients under age 21. No coverage for those over the age of 21.

OPTEMETRIC CARE - For those under 21, is the same as dental care. (EPSDT)

PODIATRY CARE - Certain non-routine medical and surgical services are provided.

HOME HEALTH CARE - 100% benefit if a physician provides written plans for type of services required.

DRUGS - Most prescription drugs are a benefit.

REHABILITATION HOSPITALS - Benefit if the hospital is licensed by the state.

REHABILITATION CENTERS/CLINICS - Benefit if licensed by the state.

OUTPATIENT CLINICS - 100% payment.

EMERGENCY CLINICS - 100% payment.

PHYSICAL THERAPY - 100% benefit only while in the hospital or as a hospital outpatient.

OCCUPATIONAL THERAPY - Only a benefit to treat an illness or injury while in the hospital.

SPEECH AND HEARING - Speech therapy is a benefit for persons over 21 only while hospitalized for treatment of illness or injury. Speech and hearing is a benefit for those under 21. (EPSDT)

PROSTHESES AND APPLIANCES - Internal prosthetics are a benefit, external prosthetics are not, nor are appliances. If a person is a recipient of Medicare and Medicaid, Medicaid will pay 20%. Medicare does not pay for external prosthetics and appliances. Requests for manual or electric wheelchairs under Medicaid are considered on an individual basis and require a doctor's prescription.

DISPOSABLE MEDICAL SUPPLIES - No benefit.

LONG-TERM CARE FACILITIES - 100% benefit.

3. Medical Indigency

The Medical Indigency Program provides medical care for anyone living in

Colorado who has no insurance, or who has insurance which does not cover the total medical bill. A person whose income is below $233.00 a month does not pay anything for medical care, with income above $233.00 a person pays a percent of his medical care. The amount a person pays is determined on a pay scale according to his income, and how many dependents he has. The Medical Indigency Program also provides dental care, eye care and eye glasses at little or no cost to low income individuals. A disabled person receiving public assistance pays nothing. A person can only receive the Medical Indigency coverage at a Hospital or Health Center that participates in the program, i.e. one cannot choose his or her own physician. In the Denver Metropolitan area, Denver General Hospital, the West and Eastside Health Centers and other Denver General Hospital health stations are the only participating agencies in the Medical Indigency Program.

4. Workman's Compensation Insurance

Injured workers are covered by Workman's Compensation Medical Insurance for $20,000 of medical expenses. In addition, the worker remains eligible for Vocational Rehabilitation.

4. General Assistance

General Assistance is a county financed public assistance program for people over 18 who are temporarily unemployed, have a mental or physical deformity, and who are not eligible for AND or SSI. General Assistance recipients receive free medical care at county hospitals and clinics. Under this program, a disabled person can also obtain medical supplies not covered by Medicare or Medicaid--if they have no other resources, have a doctor's prescription, and if the Department of Social Services approves. The recipient then pays only the first $6.00 and General Assistance pays the rest. Under this same program, the Department of Social Services also pays for wheelchair cab trips to doctor's offices, dentist's offices and to ophthamologist'soffices. The disabled person's caseworker must make the arrangements.

EXPENSES AND BUDGETS

The disabled, of course, have all the normal living expenses that the able-bodied population has; rent, food, clothing and so on.

The low income disabled also get the same assistance that other low income people get, such as food stamps, and rent subsidy.

But a disability causes many extra expenditures above and beyond these so-called normal expenses. The disabled needs attendant care, homemaker care, modification of his residence (i.e.; ramps or door widening), wheelchair, seating pads, other medical equipment and supplies , not all of which are covered by Medicaid. Further, transportation is a real necessity,either public transit or expensive private wheelchair van service.

The best way to assess the adequacy of income vs. expenses is to look at some budgets. Four budgets are presented here. The first two have been created to show the thin boundaries betwen bare survival and relative comfort. The other two are actual budgets from two members of the Atlantis Planning Staff.

Sample Budgets

Assumptions: The people for whom the budgets are drawn are typical of those severely disabled; single; between the ages of 20 - 30; having no family support; on public assistance; living alone in a one-bedroom apartment; posessing no automobile; in reasonably good health; and who are managing in a wheelchair. These typical cases receive SSI and the maximum homecare allowance.

Budget 1: This is a minimum budget, designed to squeeze a level of subsistence out of an income consisting of SSI - CS ($185.00) and AND ($217.00) - a total of $402.00 per month.

Budget 2: This is a budget based on our recommendations that the State Maximum Level of Income be raised by $65.00 to $250.00 per month, and that the homecare allowance be raised by $183.00 from $217.00 to $400.00 per month. Note that even with these optimistic projections, the resulting budget is still far from worry-free or luxurious.

BUDGET ITEMS	Budget 1	Budget 2
HOUSING	46*	60*
UTILITIES	15	20
PHONE	9	15
FOOD	66	75
NON-FOOD	5	10
CLOTHING	5	15
LAUNDRY	5	10
TRANSPORTATION	12	20
PERSONAL CARE	8	10
AMUSEMENTS	4	5
MEDICAL SUPPLIES AND DRUGS	10	10
TOTAL	185	250**
HOMECARE	217	400*
TOTAL	402	650

(*) Assume Section 8 rent subsidy

(**) Assume recommended increases in Income and Homecare

Two Actual Budgets

Here are two actual budgets from members of the Atlantis Planning Staff. Both people receive a combination of various public assistance programs, as well as the homecare allowance. They earn $65.00 per month, the maximum allowed by law before benefits are reduced.

"A" is a female, age 26, quadriplegic living in her own apartment, and receiving daily care from attendants she hires herself.

"B" is a female, age 29, with severe rheumatoid arthritis, living with her mother in an apartment and sharing living costs with her. Her mother provides the necessary attendant care, which is considerably more than that covered by the homecare allowance.

1. Budget of "A"

"A" receives SSI	$167.80
Homecare Allowance	217.00
Colorado Supplement	17.20
Salary Planning Job	65.00
Total	$467.00

"A" actually needs at least three hours of attendant care daily. At the present rate of $3.00/hour, the amount comes to $270.00 per month, which is $53.20 more than the allowance. So, in effect, she can only afford two and one-half hours of daily attendant care.

"A" BUDGET ITEMS	AMOUNT $'S	NOTES
HOMECARE	217	2-1/2 hours per day
RENT	57	Section 8 subsidy
UTILITIES	10	
PHONE	15	Extension is included
FOOD	60	
NON-FOOD	25	
CLOTHING	20	
DRUGS	5	Over the counter
REPAIRS	5	Wheelchair and hand brace
LAUNDRY	10	
TRANSPORTATION	10	
PERSONAL	10	
RECREATION	20	
TOTAL	464	

INCOME:	467
EXPENSES:	464

There is a $3.00 surplus. Keep in mind that this budget provides for no savings, emergency funds, etc.

2. Budget of "B"

"B" receives SSI	$ 63.40
SSA	124.40
Homecare Allowance	214.00
Salary Planning Job	65.00
Total	$466.80

Attendant care needs: four hours per day, which necessitates someone to prepare meals, as well as to attend to personal needs. Four hours per day at $3.00/hour is $360.00 per month, exceeding the allotted homecare allowance by $146.00. In effect, "B" can only afford 2.3 hours of care per day. In this case, her mother makes up the required extra time while they are living together.

"B" BUDGET ITEMS	AMOUNT $'S	NOTES
HOMECARE	214	
RENT	61	Section 8 subsidy
UTILITIES	35	Includes laundry
PHONE	15	
FOOD	60	
CLOTHING	20	
NON-FOOD	25	
TRANSPORTATION	10	HandiRide to work and back
TOTAL	440	

INCOME: 466.80

EXPENSES: 440.00

26.80

There is not really a surplus of $26.80 because of the inadequate homecare funding to which this surplus is applied.

DISINCENTIVES TO WORK

The "Protestant Work Ethic" is one of these virtues often invoked to criticize the fact that people who are on public assistance are not working for their income. What is less well known, and what deserves to be known, is that there are powerful disincentives built into the system that, in practice, prevent a person from leaving public assistance and becoming financially independent.

Historically, disincentives--in the form of income limitations--originated with the original Social Security Act during depression days, when it was important to take the elderly out of the labor market and make more jobs available. Other public support programs have since followed this precedent, to a point where recipients are not identified any more by their problems, but rather by the maximum they can earn before losing their benefits.

Following, are some of the rules leading to disincentives, and some examples to show the absurd effects of these policies.

Disincentives and SSI

1. Earnings over $65.00 are deducted $1.00 for every $2.00 earned over $65.00 from the SSI payment.
2. If an individual is receiving DI benefits of $150.00, SSI will supplement him by $37.50, up to the maximum level of income of $187.50. Assume

that in addition he earns $140.00. After subtracting the permitted $65.00 he is allowed to earn before deductions from SSI, he is left with $140.00 minus $65.00 equals $75.00. Half of the $75.00 ($37.50) is deducted from the supplemental $37.50 SSI check, ($37.50 - $37.50 = 0) in effect terminating SSI payment, the Medicaid coverage, and the homecare allowance. It cannot be emphasized enough that the loss of Medicaid leaves the severely disabled person intolerably exposed to the potentially catastrophic cost of medical care.

3. A disabled person receiving SSI and earning between $140.00 and $180.00 may lose all his SSI benefits and Medicaid, depending upon the severity of his disability.

4. If a severely disabled person earns $200.00 a month, he is considered able to do 'Substantial Gainful Activity' and loses all his SSI benefits including Medicaid.

Disincentives and the Colorado Supplemental and Homecare Allowance

1. For the first $80.00 earned, a person does not lose any of his CS or homecare allowance. Every dollar earned above $80.00 however, is deducted dollar for dollar from his AND check.

2. If a person receives $17.20 in CS-AND, and also earns $97.20 a month, he loses the CS-AND.

3. If a person is the recipient of CS, and the total homecare allowance ($234.00), and if that person earns $150.00 a month, the first $80.00 is not deducted from his AND check. The remainder is deducted from the AND check, dollar for dollar. His AND check, in effect, can be reduced to $234.00 minus $70.00 equals $164.00.

Disincentives and Social Security - DI Benefits

If a person is the recipient of DI benefits only, he can use the SSA's nine month Trial-Work Period to determine ability to be gainfully employed. This regulation was actually supposed to act as an incentive to employment, but in practice the person's benefits can be terminated anytime.

1. If a DI recipient on a nine month Trial-Work Period, is determined to be gainfully employed he loses his DI benefits, even if he is not earning $200.00 a month. This depends on the severity of his disability.
2. If a severely disabled DI recipient is on a Trial-Work Period and is earning less than $200.00 a month, he may be determined unable to be classified in the Substantial Gainful Employment category. He is then able to earn an income and not lose his DI benefits as long as his earnings, are under $200.00 a month.
3. Any DI recipient, no matter how severe his disability, will lose his DI benefits after the nine month Trial-Work Period. If he is earning $200.00 a month or more, he may be considered able to do Substantial Gainful Employment.
4. Loss of DI also means loss of Medicare coverage. If a person loses his job and comes back to DI, he must wait two years before Medicare benefits can be resumed.

Examples of Disincentives

Assume that a severely disabled person is receiving the maximum SSI-CS and homecare allowance. These are the amounts the person receives:

Supplemental Security Income (SSI)	$167.80

Colorado Supplement (AND)	17.20
Homecare Allowance (AND)	217.00
TOTAL	$402.00

Earned Income

Assume now that this disabled person gets a job and earns $180.00 a month. How much of the assistance payments would the person lose? By how much would his net income increase? (The earning figure of $180.00 is used because it is the limit of earnings before losing SSI eligibility).

Deductions from SSI

Earned Income	$180.00
Permitted Income Limit	65.00
Difference	115.00
Deduction ($1.00 for every $2.00 earned)	57.50
Amount deducted from SSI check	57.50

SSI check after deduction: $167.80 - 57.50 = $110.30

Deductions from CS and Homecare Allowance (AND)

Earned Income	$180.00
Permitted Income Limit	80.00
Difference	100.00

Amount of AND after deduction: $234.20 - 100.00 = $134.20

Net Income after Deductions

SSI	$110.30

AND	134.20
Earned Income	180.00
NET INCOME	$424.50

Income With or Without Work Compared

Public Assistance Plus Work	$424.50
Public Assistance Only	402.00
"INCENTIVE"	$ 22.50

In other words, earning $180.00 a month increases the person's income by $22.50 a month! When one subtracts the expense of HandiRide ($10.00 a month) and similar work-related expenses, it is clear that there is no financial incentive to leave public assistance and do productive work.

As a final example, what salary would it take for a severely disabled person on public assistance to go to work and make it a viable proposition? The author of this chapter is a real-life example:

Loss of SSI	$187.20
Transportation (HandiRide has refused to provide him services, hence total dependence on expensive wheelchair cabs to go to work and back).	200.00
Medical Insurance (Blue Cross/Blue Shield, to replace the loss of Medicaid).	40.00
Attendant Care	150.00
Living Expenses*	480.00
MINIMUM SALARY NEEDED	$1057.00 per month after taxes

*(Not eligible for rent subsidy or food stamps).

PROBLEMS IN THE FINANCIAL ASSISTANCE SYSTEM

1. Income for the disabled on public assistance can come from many sources. This is often confusing, particularly if one's handicap makes communication difficult. People are often not aware of all the programs for which they might be eligible. Also, there is little if any standardization of guidelines among the caseworkers involved in the various programs, therefore, eligibility and benefits often depend on human subjectivity rather than on clearcut rights.

2. Income for the disabled on public assistance is clearly inadequate. In a society which defines the poverty level for the average individual as $2800.00 per year, "the maximum level of income" of $2200.00 per year for a disabled person--with all his special problems and expenses--is definitely inadequate.

3. The homecare allowance for the disabled on public assistance is glaringly inadequate. When homecare payments were established, about 15 years ago, it was not far from the monthly cost of nursing home care, and could purchase an adequate amount of attendant services. Today, fifteen inflation riddled years later, a month of nursing home care has tripled to about $600.00 per month, but the homecare allowance has only gone up by $17.00 to $217.00 per month--and that is the maximum amount for only the most severely disabled. Others get less.

4. An important element in the services needed by a disabled person is homemaking, i.e. some help in keeping living quarters clean, help in shopping, and help in meal preparation. This is work that is generally not done by all attendants; in any event there is not enough money to pay for these services even if attendants are willing to do it. Such homemaker services do exist however and

are available from the City and County of Denver, but there's a hitch. An obscure administrative regulation prohibits recipients of homecare assistance from receiving homemaking services. Thus the people most in need of such help are forced to choose between attendant care or homemaking--a cruel choice since both are essential to the severely disabled person trying to live with some independence and dignity.

5. The way payment schedules are arranged today, there is a definite financial incentive for the state and county to have a disabled person reside in an institution or in a nursing home rather than in an independent living arrangement. In independent living situations, some of the support burden shifts from the federal government to the state and county. The following figures and breakdowns illustrate this point.

PERCENTAGES OF FEDERAL, STATE AND COUNTY FUNDING OF PUBLIC ASSISTANCE PROGRAMS

	FEDERAL	STATE	COUNTY
GENERAL ASSISTANCE			100%
COLORADO SUPPLEMENTAL		80 %	20%
HOMECARE ALLOWANCE		80 %	20%
AFDC	54.45%	25.55%	20%
MEDICAID	54.45%	45.55%	

NURSING HOME COSTS PER DAY RANGE FROM $12.50 up to $18.59 (AS OF JULY 1, 1976)

THE HIGH COST PER DAY OF $18.59 X 30 DAYS	=	$557.70 A MONTH
PERSONAL NEEDS ALLOWANCE (SSE)		25.00 A MONTH
TOTAL NURSING HOME COST PER MONTH		$582.70

FEDERAL AND STATE SHARE OF NURSING HOME STAY:

Federal Share of Medicaid	$225.91
Personal Needs Allowance (SSI)	25.00
$167.80 (SSI) - $25.00 (PNA-SSI) =	142.80
Total Federal Share	393.71
Total State Share of Medicaid	188.99
TOTAL	$582.70 A Month

Federal pays $204.72 more for nursing home stay than the state does per month.

FEDERAL, STATE AND COUNTY FUNDING FOR A PERSON RECEIVING PUBLIC ASSISTANCE AND LIVING OUTSIDE A NURSING HOME:

State Share of Home Care Allowance	$173.60
County Share of Home Care Allowance	43.40
State Supplemental to SSI, Sthat Share	13.76
State Supplemntal to SSI, County Share	3.44
Total State and County Funds	$234.20
Total Federal Funds (SSI)	167.80
TOTAL INCOME	$402.00

It costs the state and county $45.21 a month more for a disabled person to live outside a nursing home. Note that the total cost to government for a person outside a nursing home is $180.70 less than the cost in the nursing home.

RECOMMENDATIONS

1. Integrate payments. Result: more simplicity, reduction of paper work, reduction in total administrative costs, and standardization of caseworker policies.

2. Increase the state "Maximum Level of Income" from $185.00 to $250.00 per month. This can be achieved most easily by increasing the Colorado Supplement.

3. Increase the homecare allowance from $217.00 to $400.00 per month, and increase it thereafter at a rate adequate to meet inflation.

4. Permit homemaker services to be a benefit for the disabled, whether they are beneficiaries of the homecare allowance or not.

5. Re-arrange payment schedules so there is no dollar incentive for any level of government to keep people in nursing homes. In effect, the cost to government should be the same in institutions or in independent living. With efficient development of the independent living concept, the cost to government will probably be less than the cost of institutionalization.

6. The following suggestions can reduce (via sliding scales) or eliminate the current disincentives from earning an income:

   -SSI and DI should eliminate the $2400.00/year limit on earnings

   -Raise the amount of earned income allowed by the homecare allowance before deductions, from $80.00 a month to $200.00 a month. When the earned income is above this limit, deduct only $1.00 for every $2.00 earned, rather than the current $1.00 for every $1.00 earned

   -Earned income for SSI recipients should be raised from $65.00 per month to $100.00 per month before $1.00 is deducted for every $2.00 earned

   -Abandon the two year waiting period for restoring Medicare eligibility

   -Abandon the tie of SSI to Medicaid eligibility

7. Explore the use of AFDC or other welfare recipients, in a sort of Civilian Conservation Corps framework, to help with homemaker work or simple attendant tasks for the severely disabled.

Attendant Care

Chapter Three Attendant Care

"The ideal is to furnish enough homecare to keep people out of institutions."

One of the most serious problems for a severely disabled person is that of attendant care. The cost per hour and the number of hours needed put attendant services beyond the reach of many disabled people. This chapter explains: the problems of attendant care; the possible role of local, state and federal governments for finding solutions; and gives short and long term recommendations.

The following definitions are germane to this discussion:

A home-health aide - one who has had some training in attending the personal needs of a person within a private home.
An attendant - another name for a home-health aide.
A homemaker - attends to household needs, such as laundry, cooking, housekeeping, and shopping.
A home-health agency - supplies attendants and homemakers to eligible people.
The homecare allowance - a monthly allotment from state and local governments to pay for attendant care needs.
A severely disabled person - in this context, is a person confined to a wheelchair and/or in need of an attendant to help with activities of daily living.
Activities of daily living - basic activities necessary to personal existence, such as dressing, washing, eating, grooming.

Good and affordable attendant care is a necessity for those severely disabled persons wishing to live independently. A good attendant is honest. Once an attendant puts a severely disabled person to bed, the disabled person cannot get out of bed to prevent a theft. Many attendants take advantage of this situation. Money and personal belongings simply disappear both in independent settings and nursing homes.

A good attendant is dependable. If a disabled person cannot rely on an attendant to be there, he/she cannot be fully functioning and productive. For example, if an attendant does not arrive to help the disabled person out of bed in the morning, that person will not be able to fulfill the duties of the day. An attendant should be willing to give help when needed, to be flexible and open-minded. If a disabled person needs something not in his ordinary routine, the attendant should be willing, rather than hesitant and resentful.

An attendant should be able to function smoothly and accurately in case of an emergency, should know his physical limitations and strengths, and above all, should respect the client. An attendant need not, however, be superhuman. If the attendant has respect for the client, the other characteristics come naturally. Unfortunately, some attendants may be sadistic or masochistic or may attempt to mother or to degrade the client. Frequently, transients are attracted to attendant jobs. In order to attract good, qualified, stable, enthusiastic people to attendant jobs, reasonable salaries, vacations, annual raises, insurance and retirement benefits should be offered. These necessary and commonplace benefits cannot be offered to attendants of the disabled.

At present there are six private proprietary home-health agencies in the Denver Metropolitan area. Four of the six agencies offer both home-health aides and homemakers. Most of these agencies have a minimum work requirement of four hours a day and they are unwilling to split these hours into shifts. For some disabled persons, who need four or more hours of aid, these agencies provide an excellent service. However, the hourly rate of $3.80 to $4.50 is prohibitive for most disabled people.

The agencies' unwillingness to split the four-hour minimum into two shifts, one for the morning (to get clients up and ready for the day) and one for the evening (to put the client to bed) make their services impractical. Aides from these agencies are not allowed to administer medication or change catheters, both of which are common needs for severely disabled individuals. The additional expense of an LPN or an RN to provide such services runs from $5.50 to $6.29 an hour. In general, the private proprietary home-health care agencies cater to the wealthy; they are medically oriented, but most severely disabled persons need muscle power rather than medical attention.

In addition to private proprietary agencies, there are twelve public and private non-profit home-health agencies in the metropolitan area. Services of the public agencies are either free or are on a sliding scale, making them, monetarily at least, more reasonable than private agencies. However, they are inadequate for other reasons. For example, if a disabled person receives a homecare allowance, he/she is not able to receive homemaking or attendant services through Denver County Social Services. One agency has only two homemakers to serve the entire county. Some agencies serve seven to eight clients per attendant per day, allowing approximately forty-five minutes per client. This time frame might be sufficient for some clients but is usually not enough time for most severely disabled people. Other agencies such as Denver Visiting Nurse Service, have only professional personnel who make house calls to perform services connected with nursing care. For example, they will not help people out of bed or dress them, but will bathe them or give them medication. One agency only takes care of people with short-term illnesses. Some agencies are organized only for the elderly.

All public and private non-profit agencies have limited daily working hours. Typically, hours are 8:00 A.M. to 5:00 P.M. or from 8:00 A.M. to 7:30 P.M. Five out of the twelve agencies only provide help five days a week. Thus, there is almost no public agency to fulfill attendant needs of a severely disabled person especially on weekends.

Since private proprietary agencies are too expensive, and public and private non-profit agencies are greatly limited in services, a severely disabled person must choose between living at home with his or her family, or living in an institution or nursing home. Few can offord an apartment or are able to hire private attendants. Those severely disabled who are employed usually make just enough money to cover living expenses (including attendant fees). For instance a quaddriplegic who earns $700.00 per month before taxes and has no dependents, may pay an estimated $250.00 per month for an attendant plus $200.00 for rent, and $150.00 for food.

Finding, hiring, and keeping an attendant is often very difficult. Those disabled on any type of public assistance other than Social Security Disability are entitled to homecare allowances, the amount of which varies according to need, up to $217.00 per month. In order to attract someone to the position of attendant, the disabled must usually offer between $2.50 and $3.00 per hour. It is also necessary to advertise in newspapers, on bulletin boards in apartment houses, and in student union buildings. The turnover rate is very high because attendants are often asked to work split shifts or share hours with another attendant.

GOVERNMENT INVOLVEMENT

All three levels of government are involved, to different degrees, in the delivery of homecare services.

The federal government's provision, (through Title 18, Medicare and Title 19, Medicaid) for fifty visits from a home-health agency per year, is obviously of little use to those severely disabled who need an attendant daily.

The state funds 80% of the homecare allowance, which is used to pay attendant care needs.

Local city government supports the Emily Griffith Opportunity School, which offers a nine-week curriculum in homemaking and home-health aid. The course includes nutrition, housecleaning, lifting and bathing, but it pertains mostly to the needs of the elderly and the sick. At the termination of the class, students have the option of working for themselves or of seeking employment through a home-health agency. If the student is self-employed, he/she may be listed with the job placement office. A list of graduated students is available to people in need of attendant care.

The Denver Department of Social Services has home-health agencies, mentioned previously, funded through the federal government. A person receiving Old Age Pension (OAP), Supplemental Security Income - Colorado Supplement (SSI-CS), Aid to the Blind (AB), or Aid to the Needy Disabled (AND) is eligible for homemaker and home-health aide services without charge. Most severely disabled persons unable to afford a private proprietary agency are also not eligible for these public services, because the policy of the Social Services Department is that people receiving homecare allowances are ineligible for homemaking and aide services. Severely disabled individuals receiving Social Security Disability benefits are also ineligible for homemaker and aide services through the Denver Department of Social Services.

Recommendations: Long-Term Solutions

The federal government should set a minimum homecare allowance of $200.00 per month. This would pay for two hours of attendant care per day. Such a federal minimum would put pressure on those state governments not providing an allowance for attendant care. It would also set a base upon which other states could build their programs.

To make up for regional differences in salaries, the federal government could also form a work corps of welfare recipients (similar to the CCC of the '30's) to provide attendant care for the severely disabled. Both the disabled and the unemployed would benefit from such a program.

A severely disabled person who is employed is not eligible for a homecare allowance and must pay for attendant care out of pocket. If attendant care costs are $200.00 per month, the disabled person has to earn at least $600.00 a month in order to break even after taxes. It should be possible for a severely disabled employed person to receive a percentage of his homecare allowance based on income. After paying attendant fees, an employed disabled person should have at least $400.00 per month left for ordinary expenses such as rent, food, utilities, transportation, non-food and medical supplies, insurance, and orthopedic equipment repair. A salary up to $500.00 per month would allow a person to receive the maximum homecare allowance, according to the severity of his disability. Those earning from $501.00 to $600.00 per month would receive $100.00 per month. This program would provide an incentive for the disabled to seek employment and to be financially able to handle expenses.

Another way to attack the problem would be for the state to raise the maximum homecare allowance to $400.00 per month and set up an evaluation review for each recipient, to determine how much attendant care is needed. The review would be conducted by a panel consisting of a physician, an occupational and physical therapist, a psychologist, a disabled person, and possibly a social worker. Funds would only be used for attendnat expenses, and could vary from $200.00 to $360.00

per month. Recipients would be expected to submit monthly receipts of attendant expenses to a caseworker. Adjustments could be made periodically.

Another suggested approach is that the state raise the average homecare allowance by 50 percent, an effect which would benefit all recipients.

Perhaps the most far-reaching change in the area of attendant care would be the enhancement of the attendant role. Prospective attendants should be required to take a nine-week training program covering general techniques (inserting catheters, bowel programs, detecting and treating decubiti, sterilizing equipment, differentiating between various disabilities, and becoming sensitive to the problems of disabled persons). Another nine-week program of on-the-job training would enable all inexperienced attendants to gain confidence under the guidance of an experienced one. The type of training program would not only provide attendants with more background and experience, but would also bring more prestige, respect, and benefits to the job.

Innovative solutions to the problems of attendant care are presently being explored by Atlantis. These include:

1. "Early Action" - A halfway facility for people needing total care, or for those needing help easing into independent living situations. Attendants on 8-hour shifts are paid by the halfway house residents who pool their homecare allowance and share expenses and services.

2. The "cluster" plan - is based on a 4:1 ratio of clients to attendant. Up to four disabled persons could choose to live: (1) in the same apartment building, either individually or by sharing; (2) in a duplex, two on each side; or (3) in individual apartment building or homes that are within a 5-minute walking distance from each other. The attendant has individual housing nearby, the cost of which is paid by the clients.

A full-time attendant would earn around $300.00 per month. The expense of a relief attendant would be shared by three such cluster groups. The relief attendant circulates throughout the three clusters to relieve the full-time attendant on days off, to assist in case of emergency, and to help with other duties if necessary. (For more detail, refer to appendix). The cluster method alleviates the financial burden of attendant costs and also provides the disabled more choice in lifestyle and location.

At present, there are disabled people living independently who, although their attendant needs are taken care of, still have concerns about laundry, grocery shopping, cooking, and house cleaning. If the disabled person had higher homecare allotments, attendants could also be paid to clean, do laundry, and to cook, in addition to caring for personal needs. An alternative to higher home-care allotments is to solicit aid from as many different volunteers and social groups as possible. For example, the Gray Panthers might provide some volunteers to shop or cook or to take a disabled person shopping. Perhaps adolescents aged 12 to 15, who are capable but who are legally too young to work, could clean house in return for a small fee.

3. Another solution in operation at Atlantis' "Early Action" names the facility a Medicaid "provider", giving it a provider number like any other Medicaid supplier. Clients receiving attendant care through Atlantis are eligible for reimbursement through Medicaid if they need more attendant care than their homecare allowance covers. Medicaid will reimburse Atlantis for services up to $107.00 per client.

Other Suggestions:

1. An attendant referral system would give disabled people control and in-

dependence. A central office should maintain a file of applicants for attendant jobs. A disabled person needing an attendant could call the office, check applications, and match an attendant's available hours with the hours that he/she needs care. Upon finding prospective leads, the disabled person could contact and interview applicants, then decide who to hire. Salary would be paid directly to the attendant by the disabled person. This process gives complete responsibility to disabled people, and allows them to make choices. It also gives the disabled the right to terminate someone with whom he/she is not satisfied. Expenses for a program of this type would include a salaried person to run the office, office space, furniture, telephone and supplies - approximately $15,000.00 to $20,000.00 per year. A similar referral system currently exists in Berkley, California. Disabled people in California prefer this method, because the attendant care responsibility is left up to them, and salaries are negotiable between the attendant care responsibility.

2. Legislative action is necessary in order to force the federal government to standardize homecare allowances, set up a CCC-like program, create a federal supplement to the homecare allowance, and to increase the homecare allowance. If Congress supports such legislation, then governmental agencies such as the Department of Health, Education, and Welfare, through which the homecare allowance is allocated, would be expected to allot funds accordingly.

3. We would like to see the private sector supply education for attendants choosing to work with the disabled, as well as the manpower for such positions. Atlantis would then be able to provide follow-through with both the short and long range solutions, including:

1. providing attendants with an opportunity for experience after classroom

education

2. provide employment for the disabled by running the attendant referral system,

3. providing mobile attendant services to the working disabled, as well as the disabled on welfare,

4. supplying a portion of the team to evaluate attendant needs,.

5. being part of the team to teach prospective attendants about the clientele with which they will be working.

APPENDIX A

ACTIVITIES OF DAILY LIVING

PERSONAL CARE

Dressing

Undressing

Bathing

Oral Hygeine

Podiatry Care

Grooming

DIETARY ASSISTANCE

Preparation of meals

Assistance with Eating

Meal Planning

Shopping

SKIN CARE

Weight Shifts

Dressing Changes

Decubitis Treatment

Preventative Care
(massage, treatment)

Observation Program

Sterlizing Equipment

Cleaning Leg Bags, Urinals, etc.

MAINTENANCE & CLEANING OF EQUIPMENT

ASSISTANCE WITH EQUIPMENT

Prosthesis

Braces

BOWEL CARE

Enema

Dilatation Program

BLADDER CARE

Catheter Insertion

External Appliances

Colostomy Assistance

Irrigations

Aid with Toileting

Care and Maintenance of Equipment

RESPIRATORY CARE

Trache Dressing/Changing

Routine Suction

Aid with Coughing

Aid with IPPB

ASSISTANCE WITH MEDICATION

Assistance with Prescribed Injections

ASSISTANCE WITH PRESCRIBED EXERCIZES

SANITATION

Laundry

Changing Linens

Washing Dishes

APPENDIX B

THE CLUSTER PLAN

Definitions

CENTRAL OFFICE - A "pulling together" facility for medical counseling staff and administrator. The attendants and homemakers applications would also be filed here.

ADMINISTRATOR - Coordinates all activities of the program.

COUNSELOR - A community resource person who helps clients acquire services, schedules and takes applications from prospective attendants and homemakers.

ATTENDANT - A full-time person to assist with the personal needs of the disabled people he/she works for. This would include cooking and laundry if necessary. The attendant would live in a separate house or apartment so long as he/she is within five-to-ten minutes walking distance.

RELIEF ATTENDANT - This attendant would be a floating person. He/she would be assigned to three different clusters. His/her duties would be to take the place of a full-time attendant in case of an emergency, days off, or evening out. The relief attendant's salary would be shared by the members of the clusters.

AN ATTENDANT AT EARLY ACTION - This attendant would give primarily total care on rotating eight-hour shifts.

AN ATTENDANT AT THE CLUSTERS - This attendant would get people up and dressed, put clients to bed, attend to basic medical needs, tend to toileting functions and cook and do laundry if needed.

THE CLIENT IN THE CLUSTER - Would have to be independent enough to be able to function on his/her own after being dressed and fed for the day until late afternoon, unless an emergency occurs.

SWITCHBOARD OPERATOR - Located at the central office 24-hours a day. If a client needs something and cannot get in touch with a full-time attendant or relief attendant, the switchboard operator would then page another full-time cluster attendant or an attendant at Early Action.

EARLY ACTION - An existing "halfway" facility for persons in need of total care or for persons needing to be eased into total independence. It would have educational facilities available to teach independent living skills an individual basis.

CLUSTER - An independent living situation which would have different types of living arrangements available. It would be based on a 4:1 ratio of clients to attendants. Due to the independence this situation implies, the client needs to be self-sufficient enough to go without an attendant after he/she is once up and ready for the day.

HOMEMAKER - A person to clean clients' apartments.

THE IMPLEMENTATION OF
THE CLUSTER PROGRAM (Cont. APPENDIX B)

A disabled person interested in this program would first go to the central office and speak to the counselor. Assuming the person was self-sufficient enough to live in a cluster, he/she would have a choice of initiating the process. He/she could be included in an already functioning partial cluster or could contact three other disabled people wanting to start a new cluster. Either way the client would then look for living quarters within the general facility of the other members of the clusters. The person would then be expected to pay, ideally, one-fourth of the salary of the full-time attendant, and ideally one-twelfth of the salary for the relief attendant (refer to budgets on following page). If the disabled person needs his/her house cleaned or grocery shopping done, he/she would be responsible to hire someone to do it. Hopefully the homemaker service will be revised for this purpose.

The salary of the full-time attendant would be $300.00 per month plus rent (assuming attendant is on Section 8 rent subsidy). The relief attendant's salary would be $400.00 per month.

A disabled person who had a personality clash with the attendant could either move into another cluster/start a whole new cluster/or employ his/her own attendant.

This program could be used by both a disabled person on general assistance and an employed disabled person who wants to lessen the burden of the attendant fee. A person on general assistance would have to receive at least $180.00 in homecare allowance. am employed disabled would be expected to make at least $400.00 per month.

The entire cluster program should be operated from the multi-purpose center in conjunction with other services for the disabled.

SAMPLE BUDGET
FOR A CLUSTER CLIENT

This budget is based on the following assumptions: (1) the income consists of Supplemental Security Income (SSI), Colorado Supplement, (CS), and homecare allowance, or some equivalent; (2) the client is on rent subsidy and being transported by HandiRide.

INCOME		EXPENSES	
SSI	$167.80	*Rent	$ 50.00
		Food	70.00
CS	17.20	Non-Food	15.00
		*Utilities	10.00
*Homecare Allowance	217.00	*Transportation	10.00
		Medical Supplies	20.00
		Laundry	20.00
		Attendant	125.00
		Relief Attendant	34.00
TOTAL	$402.00		$254.00

*Assuming client receives maximum homecare allowance.

*Rent subsidy is equivalent to one-fourth one's living income excluding the homecare allowance.

*Utilities and rent combined must be equal to or below the fair market rent levels. (Telephone is not included.)

*If person is on HandiRide.

APPENDIX C

AGENCIES

AGENCY	TYPE OF AGENCY	PAY FROM CLIENT	DAYS AND HOURS OFFERED	KIND OF SERVICES	AREA	COMMENT
ADULT HOMEMAKERS	PUBLIC	FREE IF ON SSI, OAP, AB AND CS	5 DAYS/WK 8A.M.-4:30P.M.	HA&HM	D	1
ARAPAHOE COUNTY-SOC. SERVICES	PUBLIC	SCALING FEE	5 DAYS/WK 8 HRS/DAY	HA&HM	Ar	2
BOULDER COUNTY VISITING NURSES	PUBLIC	SCALING FEE	7 DAYS/WK 10½ HRS/DAY	HA	Bo&Gi	3
COMMUNITY HOMEMAKER SERVICES	PRIVATE NON-PROFIT	SCALING FEE	5 DAYS/WK 10HRS/DAY	HA&HM	MA,Ad,Ar, Je,LONGMONT	4
DENVER VISITING NURSES	PUBLIC	PARTIAL ASST.	7DAYS/WK 8HRS/DAY	HA	MA,Ad,Ar,Do	5
DOMINICAN SISTERS OF THE POOR	VOLUNTEER	FREE	7 DAYS/WK 10HRS./DAY	HM&HA	52nd-Sheridan Yale-Yosemite	6
HOMEMAKERS SERVICES FOR THE AGED	PUBLIC	SCALING FEE	5 DAYS/WK 7 HRS/DAY	HM	Bo	7
HOMEMAKER UPJOHN	PRIVATE PROFIT	HOURLY WAGE	7 DAY/WK 24HRS/DAY	HA&HM	EVERYWHERE	
HOME HEALTH SERVICES OF METRO DENVER	PRIVATE NON-PROFIT	FREE	7 DAY/WK 8 HRS/DAY	HA&THERAPY	Ad,Bo,Gi,MA, Je,Ar	8

(For Codes - See Following Key)

AGENCY	TYPE OF AGENCY	PAY FROM CLIENT	DAYS AND HOURS OFFERED	KIND OF SERVICES	AREA	COMMENTS
JEFFERSON COUNTY DEPT OF SOCIAL SERVICES	PUBLIC	SCALING FEE	5 DAY/WK 8 HRS/DAY	HA&HM	La,Av,Wh,Ed, Go	9
JEFFERSON COUNTY DEPT OF SOCIAL SERVICES	PUBLIC	SLIDING FEE	5 DAY/WK 8 HRS/DAY	HA	Je	10
JEFFERSON COUNTY HEALTH	PUBLIC	SLIDING FEE	6½DAY/WK 7 HRS/DAY	HA	Je	11
KIMBERLY NURSES	PRIVATE NON-PROFIT	HOURLY WAGE	7 DAY/WK 24HRS/DAY	HA&LITE HOUSEWORK	MA&Bo	
TRI-COUNTY HEALTH	PUBLIC	SLIDING FEE	7 DAY/WK 8 HRS/DAY	HA	Ad,Ar,DOUGLAS	
COMCARE	PRIVATE PROFIT	HOURLY WAGE	5 DAY/WK 24HRS/DAY	HA&HM	MA	
MEDICAL POOL	PRIVATE PROFIT	HOURLY WAGE	7 DAY/WK 24HRS/DAY	HA	MA	12
TEMPORARY HEALTH CARE SERVICES	PRIVATE PROFIT	HOURLY WAGE	7 DAY/WK 24HRS/DAY	HA&HM	MA	13

Chart Key
on
Next Page

KEY TO AGENCY CHART

HA - HEALTH AIDE

HM - HOMEMAKER

DC - DENVER COUNTY

Ar - ARAPAHOE COUNTY

Bo - BOULDER COUNTY

Gi - GILPIN COUNTY

MA - METROPOLITAN AREA

Ad - ADAMS COUNTY

Do - DOUGLAS COUNTY

Je - JEFFERSON COUNTY

La - LAKEWOOD

Av - ARVADA

Wh - WHEATRIDGE

Ed - EDGEWATER

Go - GOLDEN

1. This agency will not serve a person who is receiving the homecare allowance.
2. Each nurse is assigned seven to eight clients a day and ends work at 4:30 P.M. each day.
3. This department only has two homemaker-health aide people.
4. Could not supply services everyday but could supplement, for example, two days per week.
5. The complete staff is made up of nurses who will only do short professional jobs.
6. Helps only the temporary sick and poor. Does not keep early or late hours.
7. For people over sixty years of age.
8. Does not serve full-time. Staff will only come for short visits, such as bathing. Clients must meet Medicaid or Medicare requirements.
9. Recipients have to be sixty years old.
10. Clients must receive public assistance.
11. R.N.'s comprise the complete staff. Each R.N. can only work an hour a day per client.

DESCRIPTION OF THE HOME CARE AGENCIES

ADULT HOMEMAKER SERVICES - Denver Department of Social Services, 495 Dale Court, Denver, Colorado - 572-8485

DEPARTMENT DIRECTOR - Orlando Romero

PROGRAM DIRECTOR - Janet Washburn

The Adult Homemaker Services Department of the Denver Department of Social Services provides cleaning, laundry, grocery shopping, meal preparation, personal care, and other services requested by the social worker. Their recipients must be receiving Old Age Pension, Aid to Needy Disabled, Aid to the Blind, Supplemental Security Income, Colorado Supplement, or be eligible for Medicaid.

ARAPAHOE COUNTY DEPARTMENT OF SOCIAL SERVICES - 5606 South Court Place, Littleton, Colorado - 798-8461

DIRECTOR - Brad Robinson

This program offers limited home-health aide and homemaker services for people in Arapahoe County. Transportation and escort represents a major portion of their homemaker services. The payment policy is individualized to meet the recipients' needs.

BOULDER CITY-COUNTY HEALTH DEPARTMENT VISITING HURSE PROGRAM - 3450 Broadway, Boulder, Colorado - 444-3250

EXECUTIVE DIRECTOR - Dr. John Donnelly

NURSING DIRECTOR - Mary Lou Newman

The prospective client's needs are evlauated. The services which can be provided are nursing, home-health aide services, physical therapy, and speech therapy. This agency requires a local physician to certify medical needs, there is no restriction on income level.

COLORADO GENERAL HOSPITAL - COMMUNITY HEALTH PROGRAM - 4200 East 9th Avenue,
Denver, Colorado - 394-8375

ASSISTANT DIRECTOR FOR COMMUNITY HEALTH PROGRAM - Sally Beatty

This program assists the hospital staff in determining potential clients for home-health care. It is a clearinghouse and referral source for clients who need medical assistance outside of the hospital. There is no restriction on income level.

COMMUNITY HOMEMAKER SERVICES, INC. - 1375 Delaware Street, Denver, Colorado -
623-4135

DIRECTOR - Mrs. Carol B. Winkler

This program offers home-health aide and homemaker services throughout the Metropolitan area. Recipients must meet the Medicare requirements. There is no restriction on income level.

DENVER VISITING NURSE SERVICE - 605 Bannock Street, Denver, Colorado - 893-6221

DIRECTOR - Margaret D. Lewis R.N.

This service performs many medical services, but their major role is to assist hospital staff in determining potential clients who may benefit from home-health care and who are seen in clinics and hospitals. Clients must be Medicaid or Medicare recipients and have physician's orders. The Visiting Nurses visits are limited.

DOMINICAN SISTERS OF THE SICK POOR - 2501 Gaylord Street, Denver, Colorado
322-1413

DIRECTOR - Sister Anne Francis, P.H.N.

This is a voluntary organization providing part-time nursing and home-health care services. They also will help with dressings and administering medications. They loan out hospital beds and equipment. Their recipients must be under the care of a physician, must need nursing care, and the living situation must be reasonably safe.

HOMEMAKER SERVICES TO THE AGING - 3400 Broadway, Denver, Colorado - 442-2828

COUNTY DIRECTOR - Lew Wallace

PROJECT DIRECTOR - Robert Beebe

This program is not medically oriented. It's main task is that of support and chore services. Due to the stipulations of their grant, they are not able to serve persons under sixty years of age. They require that their recipients must have a medical or psychological reason for staying at home. This program serves only people over sixty whose income exceeds $185.00 per month, but is less than $340.00 per month.

HOMEMAKERS UPJOHN - 1325 South Colorado Boulevard, Suite 12, Denver, Colorado -
759-2991

ZONE MANAGER - Ted G. Kline

This agency supplies nursing and homemaker services, personnel to hospitals, clinics, and private homes upon request. Recipients must have ability to pay.

HOME HEALTH SERVICES OF METRO DENVER, INC. - 3456 West 23rd Avenue, Denver,
Colorado - 455-7464

DIRECTOR - E. Sam Fishman, M.D.

SPONSORING ORGANIZATION - Unihealth Services, Inc.

This organization provides skilled nursing, homehealth aides, and clinical treatment. It also provides various therapy in the home on a contractural basis. They require that their recipients meet Medicare requirements, must have a diagnosis requiring skilled nursing care, must be homebound, and must be under a physician's care.

JEFFERSON COUNTY DEPARTMENT OF SOCIAL SERVICES - 8550 West 14th Avenue, Lakewood, Colorado - 232-8632

DIRECTOR - Nelson L. Nadeau

This program has been made available through Title III. It has a limited number of home-health services available to people over sixty. Client payments are assessed on a sliding fee scale.

JEFFERSON COUNTY DEPARTMENT OF SOCIAL SERVICES - 8550 West 14th Avenue, Lakewood, Colorado - 232-8632

DIRECTOR - Nelson L. Nadeau

This program provides home-health service to public assistance recipients as part of the Social Workers case plan. Recipients have to currently be on public assistance.

JEFFERSON COUNTY HEALTH DEPARTMENT HOME HEALTH CARE PROGRAM - 260 South Kipling, Lakewood, Colorado - 238-6301

P. H. DIRECTOR - Carl J. Johnson

NURSING DIRECTOR - Doris M. McCoy

This program provides skilled part-time nursing in the client's own home, if home health care can be related to the client's diagnostic, emotional, social, and environmental needs. The need of home care is determined by the client's physician and is directed toward the enhancement of the medical plan. The continuation of service depends on the continuation of medical care by the physician. Recipients must have medical orders, must be homebound, and must have skilled nursing needs. Client payment is based on the ability to pay, but program will also accept payments from third party sources.

KIMBERLY NURSES - 1385 South Colorado Boulevard, Denver, Colorado - 758-7833
DIRECTOR - Mary Brass

This agency supplies nursing and homemaking services to the Metropolitan area, personnel to hospitals, clinics and private residences upon request. Recipients must show ability to pay; payment accepted from insurance.

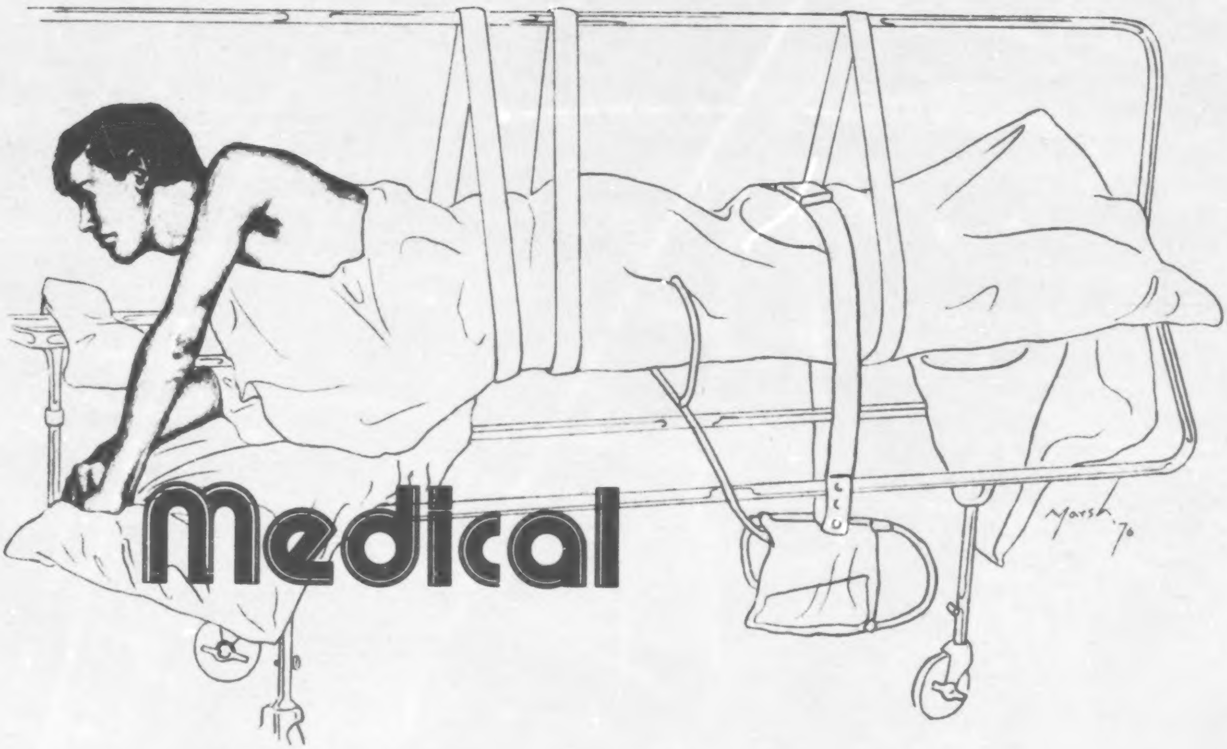
REHABILITATION THERAPY, INC. - 274 Holman Way, Denver, Colorado - 234-0226
ADMINISTRATOR - Lin Schulz, R.P.T.

This corporation specializes in the delivery of physical and speech therapy. Much of their business comes from contracts established with nursing homes, extended care facilities and contacts in hospitals. Recipients must be referred by a physician and operate according to state law for out patient physical therapy providers.

SEWALL REHABILITATION CENTER - 1360 Vine Street, Denver, Colorado - 399-1800
DIRECTOR - Jack Emrick

This center provides occupational, physical, and speech therapy, both in the center and in the client's home. It also provides special programs for the developmentally delayed and disabled school children and senior citizens. Clients must be referred by a Doctor of Medicine or Osteopathy and the client must show the ability to profit from the rehabilitive services rendered.

Medical



Chapter Four   Medical Services

"Being disabled is too damned expensive."

INTRODUCTION

When a disabled person moves from a nursing home or other institution to an independent setting, a whole range of decisions that were made for him must now be made by him. In addition to the new and basic decisions about income, shelter, food, and attendant services, the disabled person must take over the medical management of his disability. He now has to take the initiative and decide what medical services he needs, where in Denver the services can be found, how to arrange for them, how to get there, and how to pay for them.

This section will examine the medical resources available in Denver for the severely disabled person. This person is characterized by the following parameters: he is either in a wheelchair or bed-bound, he needs help with the "activities of daily living", and he is generally on a low income and on some form of public assistance.

Denver is fortunate in having a large and varied set of medical facilities that are able to cope with all the medical needs of society including the disabled. We will describe the medical facilities in two categories: first, the standard facilities every person uses, and second, the specialized facilities the disabled need.

A word about a cruel paradox. Recent advances in medicine, surgery, and rehabilitation are saving and prolonging the lives of many disabled. But these heroic efforts to keep the disabled alive are in stark contrast to the inadequate financial and social support system of our society. To save their lives--yes, but let these poeple live with dignity and an opportunity to participate in society.

ROUTINE MEDICAL SERVICES

The disabled, apart from their medical problems, have need for access to medical facilities, just as everybody else does. Denver has an enviable concentration of such medical facilities.

Physicians

A wide variety of MD's--both General Practitioners as well as specialists in all fields of medicine--are available. Over 1600 physicians are in private practice in the Denver Metropolitan area--a density of 2.4 physicians/1000 population (cf. to national average of 1.63/1000).

Hospitals

Denver has a more-than-adequate number of hospitals--30 in the Metropolitan areas, with a total of 6200 available beds or 4.5/1000 which is also the national average. There are public hospitals, university hospitals, non-profit, private, and religious hospitals. The hospitals are generally well equipped and have the latest in instrumentation (e.g. CAT scanner), services, emergency equipment (helicopter) and so on.

Clinics

Denver also has an extensive number of clinics to serve its population. Over 100 clinics provide a wide variety of specialization. Large hospitals have specialized outpatient clinics, and some hospitals specialize in clinics geared to specific groups of people (e.g. the outpatient clinic for the aged at St.

Luke's). The Denver General Hospital system runs a network of Neighborhood Health Clinics and smaller Neighborhood Health Stations.

Dental Care

The density of dentists is about equal to that in the nation, about one dentist per 2000 people. Private dentists are available to those who can pay the fee--dental costs are not covered by Medicaid. For those who can't afford private care, the Denver General Hospital/Neighborhood Health Center system makes available free (or sliding scale) dental care at 17 locations in the city. Sixteen full-time dentists, plus hygienists provide service.

Patient loads are heavy, approximately one dentist per 9000 population. Emergency care is given immediately, but other services are governed by waiting lists of six to twelve months for routine care, and two years or more for prosthetics. No crown, bridgework or orthodontia are provided. The state has a federally financed program for children with 'crippling malocclusions'.

A hopeful development, aimed at making the dental delivery system more responsive to the needs of the physically disabled, is the work of the National Foundation of Dentistry for the Handicapped, headquartered in Boulder, Colorado. For the past two years, the Foundation has worked with agencies for the developmentally disabled, organizing efforts to bring dental care to both the mentally retarded and the physically disabled. An extensive screening and referral process is conducted, with strong emphasis on teaching preventive dental health techniques to patients. The foundation is presently expanding its work to several other cities in Colorado.

Optometric Care

Optometric examinations and dispensing of eye glasses are available--either for free or on a sliding scale--to low income people at the Denver General Hospital as well as at the Westside and Eastside Neighborhood Health Centers.

Podiatry Care

There are about 50 private podiatrists in the Metropolitan area, a figure close to the national average, but there is room for more.

Denver General Hospital also conducts a podiatry clinic, and the Westside Neighborhood Health Center also offers care.

If an individual is on Medicaid, he can select any podiatrist he chooses--if the podiatrist is willing to accept Medicaid patients and put up with low and slow reimbursement policies. Even if the person is accepted, he finds that Medicaid does not cover important therapeutic appliances, such as special shoes and arch supports. Ironically, the willingness of Medicaid to reimburse for surgery often makes this the theraphy of choice, when non-reimbursement appliances would have been a better and safer approach.

Home Health Care

After hospitalization--and sometimes as an alternative to it--health care is given in the home of the patient. There are a sizeable number of private, non-profit, and public agencies providing such home health care in Denver. For low income people, the main provider is the Visiting Nurses Service, a branch of the Department of Social Services.

Details of this and other services are given in the section on homecare assistance.

Drugs

Medicaid pays for prescription drugs, but not for over-the-counter drugs. The Medical Indigency program will pay for the prescriptions its clients needs.

Special Medical Services for the Disabled

Besides the conventional medical services needed by the disabled, in the same way as with any able-bodied person, the disabled have a need for a variety of specialized medical services to satisfy medical demands of the specific disability. Because of the hub-city situation of Denver, disabled residents of the city have available a complete spectrum of such services.

Rehabilitation Hospitals

These hospitals provide intense specialization, directed towards the goal of rehabilitating the individual and returning him, as soon as possible, to a useful place in society.

Craig Rehabilitation Center specializes in spinal cord injuries and has a fine national reputation in this field. Its own staff of physicians direct the care programs of the persons, and Craig has very strong physical and occupational therapy teams. Swedish Medical Center is right next door to Craig. It has a unique neurotrauma unit and works in close association with Craig. Spalding Rehabilitation Center is a small, private rehabilitation hospital, specializing in the care and recovery from strokes.

Rehabilitation Centers

Rehabilitation centers differ from rehabilitation hospitals in that they do not have any resident patients--i.e. all services are performed on an out-patient basis.

Sewall is a rehabilitation center specializing in work with physically disabled children and young people, particularly those stricken with cerebral palsy. A complete staff of physical and occupational therapists as well as speech therapists provide service.

Out-Patient Clinics

Most major hospitals, including Denver General Hospital and Colorado General have extensive clinics with access for out-patients who need care in orthopedics, physical and occupational and speech therapies, and other areas of interest to the disabled.

Emergency Care

The availability of good emergency care can be a crucial factor for certain disabilities. For example, people with indwelling catheters are vulnerable to a condition called "autonomic hyperflexia", caused by clogging of the catheter and resulting in a sudden rise in blood pressure. It is vital for emergency personnel to understand and properly diagnose this potentially fatal condition as soon as possible. Education about this and other conditions of the disabled must be made available to various health personnel involved.

Physical Therapy

Physical therapy is an essential component in all rehabilitation efforts. By means of individual programs of exercise, it aims at restoring as much of the muscle function and tone of the person as possible. All rehabilitation centers and hospitals have physical therapy programs, both inside the hospital, as well as an out-patient basis. In addition, there are private firms offering this service.

Occupational Therapy

Occupational therapy deals with improving or restoring functions impaired by illness or injury, and improving an individual's independent functioning. Occupational therapy is particularly important for spinal cord injuries, in order to permit patients to resume activities of daily living. Occupational therapy is available at Craig, Sewall, Spalding, Denver General Hospital, Colorado Medical Center, as well as in other general hospitals, and some private organizations.

Speech and Hearing

Speech and hearing therapy is very important in restoring speech to stroke victims, and in working with persons that have cerebral palsy. It is available at the rehabilitation centers and at most major hospitals.

Prostheses and Appliances

Ready access to buy, fit, and repair prostheses and ostheses is very important to the disabled, otherwise their functioning and mobility can be seriously threatened. There are about 19 companies in Denver which sell, rent and repair manual and electric wheelchairs, canes, braces, walkers, and so on. There are 20 companies that make and sell artificial limbs and special orthopedic appliances. Among these area few that have national recognition, i.e. they are among the few companies in the country skilled in the delicate art of making and adjusting complex hand braces. In addition, several of the major rehabilitation hospitals and general hospitals have in-house shops where braces are made and adjusted.

Disposable Medical Supplies

These are particularly important for spinal cord injuries, as well as for others having to cope with catheter devices for maintaining urinary control and bowel programs. The catheters, "chux", and others are widely available at little or no cost to the low income disabled, via Medicaid, the General Assistance program, or the Medical Indigency program.

Long Term Care Facilities

The nursing home industry really started to grow dramatically with the arrival of Medicaid as a funding instrument. Between 1960 and 1970, the number of nursing homes and related facilities increased nationally by 140 percent, to 23,000--and the number of beds more than tripled, to 1.1 million. At the end of 1971, over one million elderly and disabled were in nursing homes. Despite standards and increasing public scrutiny, a bleak picture of the continued warehousing of human beings continues to be the rule rather than the exception. Impersonal care, dehumanization, poor medical procedures, or outright neglect characterize this form of "medical" residence. A special tragedy is that of young disabled people found scattered amidst the largely geriatric population of the nursing homes. Already hindered enough by their own disability, the lives of these young people are made worse by their isolation and the alienation of their surroundings. The root belief of Atlantis is that practically all of these young people could live independently with the right supporting services.

The two major kinds of facilities are the (Skilled) Nursing Care Facility (NCF) and the Intermediate Health Care Facility (IHCF). An NFC is a health institution providing regular medical care and 24-hour nursing service for illness, injury, or disability. IHCF's are health institutions providing supportive, restorative, and preventive services to individuals requiring care, but not requiring regular medical and 24-hour nursing service.

The May 1976 edition of the "Directory of Colorado Health Facilities", published by the Colorado Department of Health, lists a total of 78 facilities (NFC and IHCF) for the Denver Metropolitan area, with a total of 9341 beds, (see table next page). One-third of the beds are in the City and County of Denver, the other two-thirds are in the surrounding suburbs, particularly in Lakewood. To a large degree, this distribution reflects the relative strictness of the codes governing nursing homes in Denver and the suburbs.

PAYMENT FOR MEDICAL SERVICES

Basically, there are three sources of payment for medical services incurred by the disabled.

1. Medicare - A federal medical insurance program for retired people over 65. Disabled people under 65 who have received Disability Insurance benefits for 24 months are also entitled to benefits.
2. Medicaid - A state medical assistance program, partially funded by federal money for the benefit of categorically needy persons whose income is under $175.49 per month.
3. Medical Indigency - A state funded medical assistance program for indigent people having no health insurance, or whose insurance does not cover the total medical cost. In Denver, medical care is dispensed by the Denver General Hospital's hospital system, including the Neighborhood Health Centers.

NURSING HOMES IN THE DENVER METROPOLITAN AREA

Nursing Care Facilities (NCF)
Intermediate Health Care Facilities (IHCF)

	1975			1976		
	Facilities	Beds	%	Facilities	Beds	%
DENVER	26	3111	34.0	30	3462	37
SUBURBS						
ARVADA	2	174	1.9	2	174	1.9
AURORA	4	455	5.0	4	412	4.4
BOULDER	6	613	6.7	6	613	6.6
BRIGHTON	2	230	2.5	2	230	2.5
COMMERCE CITY	2	237	2.6	2	237	2.5
EDGEWATER	1	44	.5	1	42	.5
ENGLEWOOD	4	482	5.2	4	482	5.2
LAKEWOOD	12	1944	21.2	13	1997	21.4
LITTLETON	2	315	3.4	2	315	3.4
LONGMONT	3	387	4.2	2	300	3.2
THORNTON	2	180	2.0	2	180	1.9
WESTMINSTER	3	416	4.5	3	416	4.5
WHEATRIDGE	6	477	5.2	4	361	3.9
WINDSOR	1	120	1.3	1	120	1.3
TOTAL	76	9185	100.0%	78	9341	100.0%

(Data from DIRECTORY OF COLORADO HEALTH FACILITIES, Colorado Department of Health, May 1975 and May 1976 Editions).

Details about the eligibility and benefits of these three programs can be found in summary form in the chapter, "Income and Expenses" and in detail in the appendix.

Health Insurance for the Disabled

For the disabled person who is working and not dependent upon public assistance, it is essential that he be covered by good medical insurance. The risk of a serious flare-up or aggravation of his condition is always present, and could be financially catastrophic if he is not insured.

There are basically three places where the disabled in search of health insurance can turn to:

1. The Blue Cross/Blue Shield Plan - Individuals enrolling in a non-group plan are required to complete a health statement to determine whether there are pre-existing conditions which might preclude payment of benefits during the first 11 months of enrollment. After completion of this 11-month period, benefits are paid regardless of pre-existing conditions. For the disabled enrolling in a group plan, no medical statements are required. No medical examination is required for any Blue Cross or Blue Shield Plan; and there are no riders to exclude any conditions or disabilities. Nor can any contract be cancelled, except for non-payment of dues or fraudulent use of contract benefits. Costs vary depending upon whether one is enrolled in a non-group or group contract. A non-group package of hospitalization, physician fee, and major medical supplement will range from $40.00 to $64.00 per month, depending on the benefits.

2. Health Maintenance Organization - Kaiser Permanente - For an individual contract, a disabled person simply applies, no medical examination is nec-

essary. A reviewing physician evaluates the application and makes a decision based on the medical history of the past five years. Once accepted, there are no different rates for the disabled, and no waiting periods. Rates vary from $23.00 per month for an individual, to $66.00 per month for a family with two or more dependents.

If a disabled person enrolls in a group plan, there is no need for an individual application. Belonging to a group results in immediate coverage, with no individual medical review, waiting period, or exclusion. Group rates also start at $25.00 per month and vary upward with the size of the family.

3. Private Health Underwriters - In general, private underwriters seem more discriminatory in their policies towards the disabled than the non-profit health insurers. The Travelers Insurance Company, for example, decides on each application by a disabled person on his/her own individual merits, and specifies waiting periods (for pre-existing conditions), rejection, or acceptance. The Travelers cost for a hospitalization policy ($80.00/ day benefit) is $255.00/ year for a single, non-group able-bodied subscriber.

At Mutual of Omaha, applications for medical coverage from severely disabled people are evaluated on an individual basis. A physical examination may be requested. Premiums are generally higher than premiums for the able-bodied. The impression conveyed by the Omaha representative is that wheelchair-bound, severely disabled individuals probably could not receive coverage.

HEALTH PLANNING

Do the problems of the severely disabled play a role in the health planning of Colorado? The answer ought to be found in the "Health Systems Plan Framework," the document which is the planning vehicle of the Colorado Department of Health. This document is used as a guide for expanding, developing, improving, and modernizing hospital and other health facilities, and also serves as a guide for allocation of federal and state funds. Chapter Six of this plan takes the form of a separately bound State Annual Implementation Plan, and defines the following goals and priorities of the implementation process:

General Hospital Acute Inpatient Services
Computerized Axial Tomography
End Stage Kidney Disease Services
Radiation Therapy
High Risk Perinatal care
Burn Care

Relegated to a second, later cycle of goals and priorities are those areas of vital concern to the disabled:

Long Term Nursing Care
Home Health Services
Development of Adequate Data Base Systems

These three above are precisely the areas that need work now, not in some ill-defined later planning cycle, and should be assigned the highest priority. Both long-term nursing care and home health services are the elements of home-care for the disabled. And a data base is essential, because questions about the medical care and demographics of the disabled get no answers from the

Health department today.

PROBLEMS IN MEDICAL CARE FOR THE DISABLED

From a medical point-of-view, Denver is a good place for the disabled to live, in the sense that all necessary medical services are available, and generally, payment for care via assistance payments is possible for low-income people. There are, of course, basic problems with low-income free care such as long waiting periods and crowded waiting rooms. Some other problems areas for the disabled that should be mentioned are:

1. Referral service - There is a need for an efficient and comprehensive referral service, so the disabled can find out, with a minimum of fuss and delay, what services are available, where, and at what cost.
2. Transportation - There is a need for readily available and reasonably priced transportation to take persons in wheelchairs to medical facilities.
3. Accessibility - Surprisingly, not all medical facilities are accessible to persons in wheelchairs. Many physician's offices are in private buildings that are not accessible.
4. Insurance - Availability of reasonably priced medical insurance covering pre-existing conditions is a problem. One consequence of this deficiency is a powerful disincentive to accept employment if it means giving up Medicaid protection. For some disabled, no medical insurance at any price is available. From some insurance companies, health insurance for disabled is not available at all.
5. Dental Care - There are some special problems in providing dental care for the disabled which prevents the dentist from easy access to the teeth. These are: spasticity which causes the head to move, difficulty in talking

and communicating with the dentist, and tongue thrusting or clenching of teeth caused by cerebral palsy. For low-income persons, there is the problem of month-long, sometimes years long waiting lists.

6. Technology - There is rapid and impressive growth in electronic and mechanical devices which can help the disabled. New keyboards, scanners, displays, micro-computers, and others are being developed to assist or replace defective sense organs. But there is no central location where a disabled person can find out what helpful devices exist or describe his need for getting something helpful developed.

RECOMMENDATIONS FOR MEDICAL SERVICES

Referral Service

1. Organize a good central referral service for the disabled.
2. Expand the scope of the Atlantis "Hotline" and tie it into the referral service for twenty-four hour operations.
3. Publish a complete and well organized "Handbook for the Disabled living in Denver".

Transportation

Work with the Regional Transportation District to expand the HandiRide service to take people to medical appointments.

Accessibility

1. Promote a complete accessibility survey of all medical facilities in Denver
2. Press for accessibility to all medical facilities in Denver

Insurance

Explore with Blue Cross or other major insurers some form of private health insurance with government co-insurance, to provide coverage during the 11-month exclusion period. This would permit disabled individuals to leave Medicaid and make their employment more feasible.

Dental Care

1. Expand programs for training dentists and hygienists in the special dental problems of the disabled.
2. Expand outreach programs which could provide more dental care to the homebound and to nursing home residents.

Technology

1. Develop a central data bank to keep up-to-date information on all commercial devices of interest to the disabled.
2. Develop a list of "Inventions Wanted by Disabled People"
3. Organize a working group of inventors, academic scientists and engineers to develop solutions to the "Inventions Needed" list above.

Counselling

Chapter Five Counseling Needs

"My disability makes me angry because people don't pay attention or listen to me."

INTRODUCTION

This section on counseling will include a general overview of the psychological aspects of being disabled. It is not the purpose of this section to become entangled in psychological theory, but to highlight aspects of counseling disabled persons. They are of particular value to people not familiar with the area. A discussion of body image follows, showing the relationship between anatomical characteristics and behavior in development of one's self concept.

Questions asked in this section include: How does one adjust to a disability? What are the emotional reactions to disability?

As the family plays an important role in the adjustment of any member who becomes disabled, special problems are discussed in terms of family adjustment. Last, a disabled person's relationships with society in general are examined.

SOMATOPSYCHOLOGY

The concept of body-image is difficult to express, as shown by Schidler's struggle to reach some understanding. "We may call it 'body image'. The term indicated that we are not dealing with a mere sensation or imagination. There is a self-appearance of the body. It indicates also that, although it has come through the senses, it is not a mere perception. There are mental pictures and representations involved in it, but it is not a mere representation."

What is the relationship between body and behavior? "This relation is concerned with these variations in physique that affect the psychological situation of a person by influencing the effectiveness of his body as a tool for action or by serving as a stimulus to himself or others." (Barker:1) Barker also points out that physique and behavior may be associated because of their dependence upon a common independent variable. Such variables may reside in the person, the physical enviornment or social characteristics of the situation. An example Barker gives is male physique and color blindness which are associated through sex-linked genes.

Behavior has an influence on physique as shown through prolonged psychological tension which can produce changes in blood pressure and glandular function. Physical changes in the body go far beyond the peripheral mechanisms involved, but can seriously limit the kinds and types of activities one gets involved in. The far reaching effect is that a person tends to feel he can't get involved in anything.

Wright, in her book, Physical Disability - A Psychological Approach, has pointed out that research findings in somatopsychology are inconsistent because:

1. There is no substantial indication that people with an impaired physique differ "as a group" in their general or overall adjustment.
2. There is also no clear evidence of an association between physical disability and particular personality characteristics.
3. Although personality patterns have not been found consistently to distinguish disability groups as a whole, certain behaviors rather directly connected with limitations have.
4. Public verbalized attitudes towards people with disabilities on the average are midly favorable (Wright:373).

These somatopsychological generalizations have become popular in rehabilitation fields but leave us with no real understanding of the relationship between physique and behavior. James McDaniel comments on the state of the existing research: "... while we are not devoid of a rationale for our studies, the progress of research and education in rehabilitation fields has definitely been impeded by a relatively weak foundation. In addition, the fact that such an overabundance of largely unfounded opinion and folklore exists in the field makes the job of getting at the facts even more formidable. Nowhere in the literature of any endeavors is there to be found such unreliable information and poorly conveived and executed 'research'. But the professionals involved in rehabilitation have not yet reached a state of maturity which demands more exacting and precise information." (McDaniel:14)

SELF CONCEPT DEVELOPMENT

Body image research has touched upon the aspect of self-concept that pertains to attitudes and experiences. Self concept, the self picture, is made up of a variety of personal characteristics: notions about one's own body, satisfactions it gives and denies him, his interest and abilities, seeing himself as shy or outgoing, happy, sad, nervous, calm, and his psychological identity.

Self concept is made up in part of body image and will vary according to the nature and intensity of values and emotions invested in it. The nature and degree of physical disability seems to play important roles, among them, a threat to survival or mobility seriously interferes with the disabled's self concept. "The devaluating changes in the body image must be avoided at any price because they would also mean a drastic change in self concept, a threatening and self-diminishing change that cannot be tolerated." (Safilios-Rothschild:100)

Social psychologists Shibutani and Strauss have proposed that the self concept, once fixed, tends to be self-sustaining and persistent through a continuous process of selective perception by which undesirable changes are disregarded, or go by unnoticed. The individual needs to feel that his core identity persists and that he can maintain a feeling of balance of "sameness" about who he is or how he behaves.

A discussion of adjustment to disability is appropriate at this point. When the afflicted part of the image is not central to the individual's self concept, the acceptance of the disability is relatively easy, because the feelings are based in self image rather than the core of self concept. The individual thinks of himself as basically the same person.

However, when the afflicted part of the self image is central to the disabled's self concept, acceptance requires a major change in the individual's identity. This may lead to negative feelings, and devalued identity, depriving him of self esteem and self-acceptance. This drastic change may cause the individual to use the disability as an excuse for not being able to function psychologically or socially in reality.

Wright discusses coping behavior in terms of a lower-status position:

1. "As If" Behavior - The person tries to conceal his disability. He views his disability, as something to be ashamed of; he will hide, forget, or deny it. He will act "as if" there is no disability present.
2. Idolizing Normal Standards - In an effort to forget his disability with respect to his own behavior, he acts like everyone else and asks to be treated like everyone else. This could lead to repeated feelings of inferiority and failure depending upon his goals, expectations and aspirations.

SOCIAL ISOLATION

The disabled must be provided with the normal socialization process which all people go through. These are internalizing society's norms and values and integrating and structuring one's lifestyle. One's self concept development depends on feelings of adequacy and usefulness. Unfortunately most severely disabled persons have not had the opportunity to work and achieve in a social situation provided by work, and characterized by complex sets of norms, rituals, and customs.

VOCATIONAL REHABILITATION

The Vocational Rehabilitation client selection process has been accused of being too subjective and too dependent on the whims and desires of the counselor who decides who will and will not be served. The Urban Institute Study, in a comparison of persons with identical, severe disabilities and functional capabilities, found that 59% of the Vocational Rehabilitation counselors felt there are severely handicapped persons who would not be accepted even though disability and functional capacity is the same as the ones accepted. The salient characteristics of those individuals rejected are:

a. poor motivation/attitude
b. no potential for employment
c. too young

The survey showed that the most important characteristic which a Vocational Rehabilitation counselor looks for is the "apparent motivation of a severely handicapped person for work." (95%) The next most agreed upon characteristics were "ability to leave home to make applications", "keep appointments", "receive services", and "realistic vocational goal".

In Denver, persons not qualifying for Vocational Rehabilitation totaled 940 for fiscal year 1976. Persons qualifying totaled 10,447. The reasons for not qualifying are as follows:

Unable to locate, contact or moved
Handicap too severe, or unfavorable medical prognosis
Refused services or further services
Death of the individual

Client institutionalized
Transfer to another agency
Failure to cooperate
No disabling condition
No vocational handicap
All other reasons not specified above

The emphasis in vocational rehabilitation has been, and probably always will be, vocational placement. As can be seen from the above figures, a sizable portion of the population is not being served. This could indicate a need for a change of emphasis, particularly since the population stressed under the 1973 Vocational Rehabilitation Act includes the severely disabled.

COUNSELING

Because of the vocational emphasis, the Vocational Rehabilitation "counselor" does not really have the time to invest in the psychological state of the client. The current Colorado client to counselor ratio is 175 to 1.

Not only is counseling for the client necessary, but also counseling of the client's family. What is the family's reaction when one of its members is disabled? Along with the disabled person's adjustment to his/her disability, the family also adjusts with much the same stages of development.

Some of the initial reactions are those of grief, questions like: "Why me?, Why is God punishing me?", a feeling of helplessness, or an overwhelming fear that makes the parents unsure about what to do next. Another burden the family faces is the increased financial strain that goes along with the high cost of medical care.

The next stage is anger. This is usually directed at the medical profession. Statements like "Why can't you do anything?" and "Can't you find a cure?", are common. The resolution of this anger leads to acceptance of the disability. The parents realize that their child is unique and special; someone who requires attention and care but gives so much love in return. A word of caution--because of the extra care involved, the parents may tend to be over protective and shelter the child extensively. This has unfortunate psychological ramifications. The child becomes socially deprived, has no concept of responsibility and tends not to be able to make decisions. A reality orientation is lacking and ego functioning is weak. Again, this is an area in which counseling plays an important role for everyone's adjustment.

There is much research in the field of general counseling, but very little is known about the area of counseling the disabled. Some of the literature pertaining to parents explores the need to provide counseling to help them deal with their anxiety, guilt, and denial that happens as a result of having a handicapped child. Commonly discussed is the need to provide reassurance and support to the parent, in addition to sharing and working through specific problems. Noticeably lacking is information for parents on what to expect from conferences with teachers and doctors about their child. The parents in turn have no idea about the kinds of questions to ask, and what questions will be asked of them.

It is generally stated that there is a need for counseling to facilitate the development of an "adequate self concept." Research so far has shown there is no particular definition of counseling and there is little agreement as to what counseling is or should be. Until research techniques are improved and extensive research is performed, the disabled and society will remain in the dark as to the effects of a disability and how it relates to them. The disabled and parents will continue their "shopping behavior" (Busgaglea 46) searching for professionals to give them answers they want to hear in their search for acceptance of a disability.

RESEARCH FINDINGS IN DENVER

The counseling portion of the Atlantis needs assessment by Social Change Systems showed interesting results. An attempt was made at comparing other research, when available, to our results.

It is generally thought that disability affects one's outlook negatively. Psychological studies show the opposite to be true. Our Atlantis Needs Survey also points in that direction; positive emotions outnumber the negative ones. The disability has made persons more aware, sensitive, caring and stronger.

Ten persons said the disability has had no effect on them. A few said it has made them withdrawn. The question was posed "What are the most common emotions expressed by a disabled person?" Frustration was most prevalent, with depression and helplessness following.

Most persons, when feeling these emotions, try to deal with the problem introspectively (25%), while others get socially involved with people (25%), others talk to someone specifically (16%), and 13% wait until it passes. Also, when asked if that method of dealing with the problem was adequate, 57% felt that arrangement was adequate, 15% were unsure and 25% said it was inadequate. Five of the sixty surveyed were receiving professional counseling with four of the counselors being able-bodied psychologists.

The preferences for types and sex of counselors are as follows: Six (10%) wanted disabled counselors, five (8.3%) wanted able-bodied counselors, three of them wanted male counselors and forty-six (77%) express a no preference for physical conditions of counselors.

The need for counseling is expressed in the following results:

A. 73% of the respondents (44) want a chance to discuss their concerns with other disabled. 10% (6) said they didn't and 8% (5) were unsure.

Safilios-Rothschild states "interaction with other disabled persons usually seems to present no problems to a disabled person, but is on the contrary, quite helpful in making it easier for him to accept his predicament. The 'positive' influence of such interactions seems to occur either through identification with another person afflicted with the same type and degree of disability, or through a comparison of his disability with that of a more seriously disabled person which produces a feeling of being much better off" (Safilios-Rothschild:121).

B. Twenty percent (12 persons) of the sample have attempted suicide and only five of the twelve said they received adequate counseling.

FEDERAL INVOLVEMENT

PL 94-63, the Special Health Revenue Sharing Act of 1975, helped establish community mental health centers. Included within such facilities are:

A. Inpatient services, outpatient services, day care and other partial hospitalization services, emergency services.

B. Program of specialized services for the medical health of children, including full range of diagnostic, liaison and follow up service.

C. A program of specialized services for the mental health of the elderly, including a full range of diagnostic treatment, liaison and follow up services.

D. Consultation and education services - which are for a wide range of individuals and entities involved in mental health.

The disabled population, however, is not specifically mentioned as part of the target population as other groups are. The mental health needs of the physically disabled should be specifically included in this legislation.

1973 Vocational Rehabilitation Act

The 1973 Rehabilitation Act places its priority on the severely disabled. Over 71% of the Vocational Rehabilitation Agencies responding to the Urban Institute Study have made procedural and organizational changes that have resulted in expanded services to the severely disabled. Wright discusses the 1973 Rehabilitation Act in terms of environmental factors where behavior is a function of both the person and the environment. Rehabilitation is observed as altering a person's characteristics, such as skills, but neglecting the changing environment that may effectively negate the skills acquired. Another psycho-social factor is whether a person's behavior is seen as typical or atypical. His/her failure is seen as the result of his/her limitations. On the other hand if a group as a whole fails, it is seen as an environmental factor or difficulty of the task. Wright states that the Rehabilitation Act should be amended to include the following recommendations for determination of eligibility:

1. Diagnostic procedures must give serious attention to identification of influential environmental factors.
2. Direction should be toward improvement of environmental factors as well as the abilities of the client.

The 1973 Act recognizes the important role played by environment factors. The term "evaluation of rehabilitation potential" is defined as "pertinent medical, psychological, vocational, educational, cultural, and social environmental factors", (Section 7). Section 400 deals with the effects of "architectural, transportation, and other environmental and attitudinal barriers" on the rehabilitation of handicapped individuals.

Vocational Rehabilitation will be discussed further in the chapter on employment.

STATE INVOLVEMENT

The state has been involved with funding some for the local mental health centers in Denver, such as Ft. Logan, Bethesda, and Malcom X. The Mental Health Plan 1976-81 of Colorado does not mention the disabled as a population to serve. A recommendation would be to have them included.

LOCAL INVOLVEMENT

A survey conducted by the planning staff to establish the number of severely disabled served by area mental health centers produced disappointing results. Most public mental health agencies have no knowledge or breakdown of their clients.

A number of factors may account for this:

1. Accurate records are not kept as to the physical status of the clientele.
2. The disabled do not come to community mental health centers because of a lack of transportation and/or inaccessability.
3. Lack of funding to provide staff to serve the disabled.
4. Lack of information among the disabled about available counseling.

RECOMMENDATIONS

1. Develop public awareness campaigns to sensitize persons to the needs of the disabled.
2. Set up a program to sensitize persons who work with disabled (vocational social workers, nurses, doctors, etc.), to explore their feelings toward the disabled, their fears, uncertainties, and how they can be better prepared to work with the disabled.
3. Set up a peer counseling program using disabled counselors. The disabled person would be more empathetic toward another disabled person in a

counseling relationship. The Atlantis Needs Assessment somewhat contradicted other studies on peer counseling. The Atlantis sample did not have a great desire for individual counselors who are disabled as other studies have shown. It did indicate a very high majority wanted a peer group counseling program. Atlantis would like to see both programs established.

4. Intensify the follow-up services for disabled and their families leaving hospitals and institutions.

5. Include disabled as a category in the "Colorado Mental Health Plan 1976 - 1981".

6. Assist the area mental health agencies in becoming more aware of the needs of the disabled by establishing in-service training.

7. Through an information service provide information and assistance in the areas of mental health and counseling.

8. Encourage grants for research in the relationship between body image and behavior; the relationship between disability and the need for counseling, and the psychological effects of restricted mobility.

MENTAL HEALTH AGENCIES

NAME OF AGENCY	AREA SERVED	FUNDING	COUNSELING AREAS	TOTAL PERSONS SERVED	NO. DISABLED SERVED
ADAMS COUNTY MENTAL HEALTH CENTER	ADAMS COUNTY	FEES, CONTRIBUTIONS UNITED WAY GRANTS		N/A	N/A
AURORA MENTAL HEALTH CENTER	AURORA	CITY, COUNTY, FEDERAL, STATE	PERSONAL PSYCHOLOGICAL	1,000/YR.	50/YR.
CRAIG REHABILITATION HOSPITAL	UNITED STATES	PRIVATE, PUBLIC	PERSONAL	700/YR. TO 13,000/YR.	700/YR. TO 13,000/YR.
COLORADO PSYCHIATRIC HOSPITAL	COLORADO	PUBLIC, PRIVATE FEE	PSYCHIATRIC INPATIENT CARE	600/YR. TO 700/YR.	U
DENVER GENERAL HOSPITAL	DENVER, COLORADO	GRANTS, FEES, CONTRIBUTIONS	PSYCHIATRIC	3,000/CURRENT CASELOAD	U
FT. LOGAN MENTAL HEALTH CENTER	NE DENVER, NE COLORADO	STATE	PSYCHIATRIC	3,391/YR.	0
MT .AIRY PSYCHIATRIC CENTER	UNLIMITED	FEES, CONTRIBUTIONS	EDUCATIONAL VOCATIONAL	100/MO.	12/YR.
MULTIPLE SCLEROSIS SOCIETY	COLORADO	UNITED WAY	EDUCATIONAL VOCATIONAL PERSONAL	1,275/YR.	375/YR.
MUSCULAR DYSTROPHY ASSOCIATION	COLORADO WYOMING	CONTRIBUTIONS	MEDICAL GERIATRIC	700/YR.	700/YR.
SPALDING REHABILITATION CENTER	COLORADO	FEES	PERSONAL FAMILY	600/YR.	400/YR.

NAME OF AGENCY	AREA SERVED	FUNDING	COUNSELING	TOTAL PERSONS SERVED	NO. DISABLED SERVED
SOUTHWEST COMMUNITY MENTAL HEALTH SERVICES	SW DENVER	GRANTS, FEES, CONTRIBUTIONS	EDUCATIONAL VOCATIONAL	N/A	30-50/YR.
VETERANS HOSPITAL	EAST SLOPE OF COLORADO, METRO DENVER	FEDERAL, FEES, GRANTS	EDUCATIONAL VOCATIONAL PERSONAL	N/A	N/A
BETHESDA MENTAL HEALTH CENTER	NATIONAL	FEES, VETERANS ADMINISTRATION	PSYCHIATRIC REHABILITATION COUNSELING	N/A	N/A
MALCOM X	NE DENVER	FEES, GRANTS	GROUP, FAMILY, INDIVIDUAL	745/CURRENT CASELOAD	0

N/A - NO ANSWER

U - UNKNOWN

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Transportation

Chapter Six Transportation

"I haven't gone anywhere in ages"

INTRODUCTION

"Handicapped people are one of the most neglected minorities of transportation planning. For decades their needs in transportation have been neglected in favor of the overwhelming majority. This has meant that in a society where mobility is a prerequisite of living, the handicapped are forced to travel very little and either depend upon their friends and family for transportation or pay the high cost of special transportation." (Ken Dallmeyer)

Despite the introducrion of the Regional Transportation District's HandiRide, the above conclusion, based on a 1973 survey of 119 disabled individuals in Metropolitan Denver, sums up one of the major needs of the severely disabled.

The Urban Institute's Comprehensive Service Needs Study found transportation to be second only to vocational placement in terms of preceived needs among the severely disabled. Of the 1000 providers of rehabilitation services, 87% of those sampled felt the lack of affordable transportation was a major impediment to serving the severely disabled. "Almost 41% of the VR clients sampled felt they would need transportation services to go to work and 72.3% indicated a need for transportation in order to attend school. However, the most striking finding is that almost one-third of the individuals surveyed are homebound, meaning they only go out once a week or less. This seems to sum up the severity of the transportation problem for the disabled."

One of the first major studies on the transportation needs of the handicapped was prepared for the Department of Transportation by ABT Associates, Inc., of Massachusetts. The ABT study of 1969 sampled 213 disabled individuals to determine what deterred them from utilizing public transportation. In addition to the physical barriers that made transportation inaccessible to severely disabled individuals, there were psychological barriers for 16% of the sample avoiding use of public transportation. Elderly and handicapped people made almost 14% of their trips by taxi cabs while only 2% of the non-disabled population used this mode. The study also indicates that the proportion of severely disabled who are unable to use public transportation may be as high as 35%.

The initial ABT survey of handicapped and elderly people indicated that if an accessible transportation system were available at "no cost" these persons would make 50 percent more medical trips, 82% more shopping trips, 85% more church trips and 111% more social and recreational trips.

The relationship between transportation and employemnt for the severely disabled cannot be overstated. The 1969 ABT study indicated that "13% of the unemployed handicapped said they were unemployed because they had no way to get to work; 16% said their unemployment was due to the high cost of transportation and 42% said it was difficult to get to work and back." (ABT-69)

In another study conducted by ABT, "14% of the persons who completed a vocational rehabilitation program and obtained employment later became unemployed because of transportation problems, and 16.5% of all persons who received vocational rehabilitation services are unemployed because of transportation problems."

In 1971 under the auspices of the University of Denver College of Law, Judge Finesilver stated "the Department of Transportation estimated that there are 1,439,000 employable transportation handicapped persons in the U.S. and of these 103,000 are "transportation sensitive unemployed". If each of them could be made mobile and returned to work, it is estimated that annual earnings of $452,692,000 would be generated ($4,388 per person), yearly welfare payments would decline by $49,582,000, and income taxes would increase by $39,697,000. In addition, many other cultural and recreational gains would be available to these handicapped people."

The RTD HandiRide service has added a new dimension to mobility for the disabled, particularly for work and school trips. However, most of the transportation suggestions by ABT Associates, the Urban Institute, the University of Colorado Center for Transportation Studies, and other public and private bodies would further enhance service to the severely disabled in Denver.

Although a transportation plan that will enhance the mobility of the severely disabled would involve a large initial expenditure, the long range economic benefits as manifested in jobs and the reduction of welfare costs would justify any major expenditure.

DISABLED TRAVEL TODAY

Powered Electric Wheelchairs

Due to severe physical impairments such as the functional loss of one's legs and either one or both arms, many severely disabled individuals have come to rely on electric wheelchairs for mobility. Electric wheelchairs are operated usually by one finger or in some cases by one's chin or mouth. Along with increasing the range of travel, the power wheelchair has given many quadriplegics and other formerly homebound persons a means of travel.

Although electric wheelchairs have enhanced mobility for many severely disabled individuals, the state of the art has not kept pace with the increasing needs. As reflected in the Atlantis Needs survey, mechanical failures are too commonplace and the repairs too time consuming. The Center for Independent Living (CIL) in Berkeley, California received a grant from HEW's Rehabilitation Service's

Administration to develop a low-cost, easily repaired, light and efficient electric wheelchair. On a visit to CIL, three Atlantis planners talked to the designer and saw the prototype model. The chair is quite impressive and production is projected for 1977. We were told that these chairs will be sold at many more outlets than the commercial models available today.

The price for the average electric wheelchairs ranges from $1300.00 to $1600.00. For those disabled individuals who require special operating devices the price can increase to approximately $2000.00. In Colorado, the Department of Vocational Rehabilitation will purchase electric wheelchairs if these chairs will enhance employability. The process for obtaining the chair is rather time consuming (up to six months), but once obtained they are serviced by Vocational Rehabilitation until that person has been closed out as rehabilitated. The Colorado Division of Medicaid will pay for electric wheelchairs on a person-to-person basis. A disabled individual makes a request to a social worker who in turn asks for a prescription order from a licensed physician. If the physician prescribed the electric wheelchair, the social worker goes through a number of steps and if it is approved by the welfare supervisor and Medicaid personnel, purchase is authorized. Several applications for electric wheelchairs from severely disabled individuals living in a Lakewood nursing home were sent to Medicaid almost two years ago, but as of this writing were not approved. In another case, a severely disabled member of the planning staff requested an electric wheelchair from her social worker. When refused outright, she called the office of one of her U.S. Senators, who in turn contacted Medicaid. The outcome was that she obtained the electric wheelchair.

Although social workers oftentimes take it upon themselves to determine who needs or who doesn't need an electric wheelchair, many Denver physicians are ambivalent about their patient's requests for these chairs. The rationale is that electric wheelchairs require no physical exertion and can lead to atrophy of the existing muscles. This attitude has had the effect of limiting the mobility and independence of many severely disabled individuals and has virtually made them prisoners in their own homes. Electric wheelchairs should not be viewed as a replacement to physical activity, but rather as a means to enhance mobility. Few disabled individuals would allow their arms to atrophy no matter what advice a physician would give. It is doubtful that a physician would advise an able-bodied perons not to use his private car because he would be better off if he walked to work or school. Yet physicians feel no hesitation about keeping disabled individuals from one of the most proven means of individual mobility. Electric wheelchairs for severely disabled individuals are necessities, not luxuries. The late Mike Smith, a severely disabled individual with muscular dystrophy was asked once to compare his electric wheelchair to a car, Mike remarked, "Car, hell, this is my legs."

The Atlantis planning staff interviewed six people who have or use both an electric wheelchair and manual wheelchair and asked them the advantages of the electric chair. Some of the advantages were increased endurance, being able to go long distances, being able to go over different terrains with greater ease and mobility and a general increase in overall mobility. Some of the disadvantages were the high maintenance costs, the extra weight, (200 lbs.), the lack of portability (as with most manual chairs), and the frustration one has when the chair breaks down on a street. Even though there are disadvantages to the electric wheelchairs all respondents had no doubts that they were more independent and mobile with electric chairs.

Wheelchairs and Curb Cuts

Four or six inches of concrete in the form of a curb often means the edge of the earth for a severely disabled wheelchair user. Curbs restrict mobility within one's immediate environment and make access to fixed-route transportation impossible. A curb cut is a slope built into a curb and the adjacent sidewalk, creating a scooped-out effect in the sidewalk, A curb ramp is a ramp built from a curb into the street; the curb and the sidewalk themselves are not modified. As to costs, "the experience of the City of Berkeley, California indicates that ramping cost approximately $50.00 and that cutting curbs costs between $150.00 and $200.00. (Economies of scale reduce the cost per cut to the $150.00 figure when a major curb-cutting program is undertaken.) Building a curb cut into a curb when it is originally laid costs no more than conventional curbing. Although curb cuts are more expensive than curb ramps, most cities have not ramped curbs due to the interference with traffic, drainage and street cleaning." (Jones)

The City of Denver through the Community Development Administration has allocated $30,000.00 for the construction of 20-25 curb ramps. A Community Development (CD) project needs assessment concerning handicapped street curb ramps states: "a significant portion of the population (30,836) has need for the requested facilities (curb cuts). Since only spot locations in the Central Business District and the Civic Center areas have existing facilities, the remainder of the City is in need of curb cuts in the proper beneficial locations. There is the need for the handicapped to participate more fully in the work, health, shopping, education and social aspects of life." While this amount, slightly under $1.00/person, is low when compared to the $200,000 spent to build 10,000 curb cuts in Minneapolis, it will hopefully increase substantially in the years ahead.

Van and Auto Modifications

Although the majority, if not all, of severely disabled individuals would benefit from accessible public transportation, many of them could, if money were available, drive their own vans. "Due to diverse disabilities among the handicapped population, modified automobiles and vans are often very personalized vehicles. Modifications can be changes in the foot pedals, hand controls, foot controls, and experimental electronic sensor controls attached to the driver's neck." (Ron Jones)

It is estimated that the following adaptations are faily standard for most severely disabled individuals: electro-hydraulic lift ($2200.00); hand controls ($450.00); electric wheelchair lockdown ($260.00); steering device ($45.00); extended steering device ($170.00); extended top ($700.00); extended door ($350.00); standard channel ($250.00); and roll-in seat ($189.00).

The Colorado Department of Vocational Rehabilitation will pay for the above modifications if it will enhance the clients' employability. Although the cost of vans and the necessary modifications can run from $11,500.00 and up, we recommend that the Department of Vocational Rehabilitation provide more fully equipped vans to their clients on a contractual or lease arrangement. The Department currently spends approximately $15.00/day to transport a severely disabled individual via private wheelchair van companies to school or for training purposes. If the rehabilitation client were going to school five days a week for 36 weeks, the cost per year to Vocational Rehabilitation would be $2700.00 per year, $5400.00 per two years and $10,880.00 per four years. If Vocational Rehabilitation would provide a fully-equipped van to a severely disabled client under the condition that he/she transport two other disabled individuals going to the same school or training program each day, a significant savings of $20,900 ($10,800 X 3 - $11,500) over a four year period could be gained.

Regarding disabled drivers, Judge Sherman Finesilver stated in a research report sponsored by HEW Social and Rehabilitation Services, "In a survey of over 400 safety professionals, licensing officials, and judges, 71% rated the handicapped driver as average or better than the general driving public, and none rated him hazardous; overall they found him superior in driving ability, 83% called him average or better in accident rates, and 84% felt he was average or above in terms of traffic violations. 96% stated they had no recent instance where physical impairment had been a factor in an accident." Judge Finesilver cited several other studies from thoughout the U.S. as well as Sweden that confirm the fact that the handicapped are safe drivers.

Private Transit

There are several private, for profit companies in Denver providing transportation to severely disabled individuals. These companies provide door to door service on a dial-a-ride basis usually with specially equipped vans. The drivers often assist severely disabled individuals from their residence onto the van ramps and manually tie them down, (Lock the chairs into place). The cost of service varies between these companies and ranges from $10.00 to $12.00 per one way passenger trip, or $15.00 to $20.00 per round trip. Although fares are supposed to be standard, some of the companies give special rates to special customers or groups. The Ambulance Service Company (Amb-O-Cab) is the largest of the companies with a fleet of 15 vans. Amb-O-Cab serves several government agencies under purchase of service contracts. The bulk of the $210,000.00 the Department of Vocational Rehabilitation spends on its clients goes to Amb-O-Cab, as does a substantial amount from the Veteran's Administration. Although the overwhelming majority of the disabled people transported by Amb-O-Cab are not medical cases, Amb-O-Cab also operates an ambulance service and is therefore exempt from regulation by the Colorado Public Utilities Commission.

Most disabled in Denver cannot afford the specialized transportation service offered by the private firms because of the expensive rates and low incomes of the clients. Despite several efforts on the part of numerous disabled individuals to have the PUC hold public hearings on possible regulation on these firms and their high prices, no such hearings have been held. Commissioner Henry Zarlengo proposed at a meeting in the summer of 1976 that the Commission hold a hearing in regard to the wheelchair van matter but his motion died for lack of support. Smaller companies have had difficulties competing with the larger ones due to a monopoly on contracts and delayed cash flow for individual payments from government agencies. Numerous disabled individuals not served by RTD or covered under other contracts with any agency must pay from their own limited funds.

Before HandiRide and the Urban Mass Transit Administration's 16 (b) (2) program, private transportation companies were the principal means by which disabled individuals traveled. For those disabled who are covered by benefits of a particular agency (such as the MS Society) the service has been free, with the agencies then assuming the cost of transportation. For the severely disabled person who wants to visit a friend or relative, attend a movie or concert, the cost of the private van companies is outrageous.

Atlantis is not anti business, it is pro disabled. Atlantis maintains that a disabled individual has the right to transportation and should not have to spend $15.00 to $20.00/round trip for social or recreational activities. While we believe it is the responsibility of the public transportation district (RTD) to meet the needs of the disabled, we do not rule out any governmental subsidy or tax break provided to the private carriers to drastically reduce the cost of transportation to the disabled.

Special Subsidized Transportation

Since 1967, the Swedish government has operated special transportation systems for disabled individuals. Local authorities, according to Swedish law, have the responsibility of providing transportation, among other services, to the disabled. For those disabled who cannot use public transportation a license is given to them to use either taxi cabs or special adapted wheelchair-accessible vehicles. The service is door to door and although there are no restrictions for work or medical trips, private trips are limited. The disabled individuals pay at the same rates as if they used ordinary public transportation; the rest is subsidized by the local public authority.

A service and methods demonstration program in the Naugatuck Valley Transportation District of Connecticut operates a service similar to the Swedish model. In this concept disabled individuals are provided tokens, transportation vouchers or credit cards that can be redeemed by the transportation provider, private taxis or bus operators at full cash value by the agency administering the program. The objective is to improve trip opportunities for specific user groups. The program allows all holders of its credit cards to ride, but restricts cards to those who need them most. The general public can use the system to help hold costs down, but credit card holders have top priority in case of conflict.

Taxicabs

In many cities, including Denver, taxicabs are utilized to transport disabled individuals. For semi-ambulatory individuals, who for example walk on crutches, taxicabs are an important means of transportation. For an individual using a manual wheelchair and able to transfer from his or her wheelchair into a cab, taxicabs have been a very useful service. Formerly, Denver taxicab companies had no consistent policy regarding services to wheelchair users. Individual cab drivers made decisions on whether or not to transport disabled persons even though they could have been totally capable of transferring. On occasion taxicab drivers have refused to transport disabled individuals who had their own attendants to help transfer into the cab. This policy of not serving disabled wheelchair users who can transfer by themselves into taxicabs is discriminatory. The Atlantis Community brought this matter to the attention of the Colorado Public Utilities Commission in July, 1976, and requested a public hearing. In the meantime the Yellow Cab Company of Denver has issued a company policy regarding its drivers and wheelchair passengers. The company now allows wheelchair passengers if the disabled individual can transfer without assistance from the cab driver, or has an attendant.

Other Transportation Services in Metro Denver

In addition to RTD's HandiRide, the UMTA 16 (b) (2) program, and the private transportation companies, approximately a dozen other organizations, provide transportation services to the disabled. Such agencies include the Denver Red Cross, the Englewood Senior Surrey, the Salvation Army, Liggins Towers, the Littleton Town Rider, the Mayor's Commission on the Disabled, the Atlantis Community, Volunteers of America, the City of Aurora, Denver Association of Retarded Children (DARC), and Lutheran services. Although all of these groups serve disabled semi-ambulatory persons, the majority do not have ramps that can accomodate wheelchair users. In addition most operate from 8:00 to 5:00 P.M., Monday through Friday in set geographical areas. All stated, when questioned in a telephone survey, that they provide door to door service without any costs. All provided service to medical clinics and in most cases to shopping and recreational activities. None provided regular trips for work and about one-third provided service to meetings. Except in the case of the Atlantis Community which transports approximately 35 wheelchair users on a regular basis, it is estimated that no more than a dozen wheelchair users utilize the other transportation services.

REGIONAL TRANSPORTATION DISTRICT

The issue of public transportation for the disabled of Denver is intimately linked to the general problem of a metropolitan transit system, and of the agency running it: the Regional Transportation District, known as RTD. But even though RTD has been a pioneer in transportation for the disabled, the agency generates a great amount of discontent. This discontent revolves around HandiRide, the transportation service that RTD set up to serve the disabled and elderly. Before discussing their service in depth, a little history is useful for perspective.

Regional Transportation District and HandiRide

There is probably no other agency in Denver that generates as much controversy among the disabled as does the Regional Transportation District. RTD is considered to be a model in providing services to the disabled by many transit districts and transportation professionals. Requests for information about HandiRide come from all over the world according to RTD. The Elderly and Handicapped Transportation in Texas a study prepared by the Transportatin Planning Division, Texas Department of Highways and Public Transportation, lists under the heading of "Solutions in Denver and Lincoln, Nebraska" only these two models of transportation services to the handicapped. Perhaps the most complimentary statement about RTD's HandiRide comes from one of its critics. "Despite current operational problems affecting the HandiRide buses, RTD to its credit is a leader in mobility for elderly and handicapped persons with special transportation problems. RTD is one of the few and possibly the only transit authority in the United States that has started a special transit system for elderly and handicapped without any federal assistance whatsoever." (Article, Senior Edition, 1976)

The Regional Transportation District was established by the RTD Act of 1969. Several months before RTD became operational, public hearings were held throughout the region to determine the transportation needs of all citizens. Several disabled individuals in wheelchairs inquired at these hearings about the present and future accessibility of the bus fleet. RTD spokespeople stated that none of the buses inherited from the private predecessor were wheelchair accessible. In 1974 approximately 50 wheelchair-bound invididuals demonstrated their concerns for accessible buses by appearing at an RTD Board of Directors Meeting.

In addition to this demonstration a new community organization was formed for the purpose of advising RTD on the needs of the disabled. Mobility Among the Disabled, or MAD as the group was better known, was indeed mad with the lack of provisions for the disabled. Demonstrations and actions by MAD helped convince the RTD Board of Directors of the need for special transportation for the disabled. In April, 1974, the RTD Board authorized the lease of the 12 FMC buses that currently make up the HandiRide service. In an effort to provide services to the disabled and elderly, the RTD Board adopted a special needs policy on July 25, 1974. The Special Needs Policy was established "to identify, educate, and develop viable transportation for elderly and handicapped patrons whose mobility needs could be fulfilled by the Regional Transportation District."

Before HandiRide became operational in February, 1975, RTD promoted the service, prioritized the types of trips to be offered and developed a subscription service. Of the 1164 individuals in Metropolitan Denver who responded to special forms provided by RTD, 50% (582) were handicapped, 22% (128) of the 50% handicapped used wheelchairs. At the present time approximately 185 individuals (elderly and disabled) ride HandiRide.

RTD's first priorities are trips solely for work or school purposes. Disabled individuals who do not work or do not go to school do not receive service. A shopping service is offered to those already subscribing. This service enables approximately 50 disabled individuals a month to shop on Saturday mornings.

For those disabled individuals being served, HandiRide is often a means to greater employment opportunities, normalization and independence. But of all the disabled interviewed by Atlantis, 47% (60) hold a negative view of HandiRide and 63% of those served by Handiride had a negative feeling.

Of the eight individuals from the Atlantis planning staff who applied for HandiRide, seven were served. In two cases political pressures had to be applied to obtain service. The buses presented many technical problems that have hindered the service. On the other hand, the drivers have gone out of their way to assist the passengers. The basic problem besides the buses themselves has been scheduling. The fact that so many of the HandiRide buses run empty or near empty is a constant source of frustration to those under served or not served at all. Initiating the Saturday shopping service was a very positive step by RTD, but there is obviously (as reflected in the HandiRide Evaluation and the Atlantis needs survey) a pressing need for transportation for recreation, socialization, and medical trips.

The greatest factor affecting the low productivity of HandiRide has been the manner in which the scheduling first began. The lack of optimization of origins, distinations and times of the original applicants by those scheduling HandiRide caused many of the present problems. For example when RTD elected to transport a disabled patron from one end of town to another, as has typically happened, RTD effectively elminated other disabled people from the service. The HandiRide schedulers are reluctant to do much about this due to the "moral" problems associated with making this decision. Thus poor decision-making rather than an overt attempt to "build in failure", as some critics contend, has caused HandiRide to operate inefficiently. Hopefully however, the zone-transfer system, which the operations committee and staff are exploring will significantly increase productivity.

For almost two years there has been no increase in the size of the 12 bus HandiRide fleet. The lack of expansion, despite the obvious needs of the disabled coupled with RTD's hard line on total accessibility is alarming to many disabled individuals. The disabled of Denver care much less for RTD's stature in the nation than they do for RTD's stature in the community.

Although the costs of transporting disabled individuals on HandiRide has been relatively high, it is offset by providing special services to elderly people during off-peak hours. The following range of costs are from the HandiRide evaluation:

HandiRide:

Cost per mile : $ .78 to $ 1.10
Cost per hour : $8.41 to $11.94
Cost per passenger trip: $5.86 to $11.62

Special Elderly Service:

Cost per mile : $ .69 to $ 1.27
Cost per hour : $5.66 to $11.94
Cost per Passenger Trip: $ .68 To $ 1.56

Combined HandiRide and Special Elderly Services:

Cost per mile : $ .83 to $ 1.10
Cost per hour : $8.41 to $11.61
Cost per passenger trip: $3.30 to $11.62

Since November contained a holiday period and a considerable number of colder days, the October figures have been selected as being most representative of the costs currently being incurred by the HandiRide and Special Elderly Services:

HandiRide:

Cost per mile : $ .78
Cost per hour : $ 9.80
Cost per passenger trip: $ 6.78

Special Elderly Service:

Cost per mile : $ 1.27
Cost per hour : $10.46
Cost per passenger trip: $ 1.01

Combined HandiRide and Special Elderly Service:

Cost per mile : $ .84
Cost per hour : $ 9.82
Cost per passenger trip: $ 4.21

Comparisons of cost figures associated with similar types of service provided by other transit agencies are shown in Table VIII. Central New York Regional Transportation Authority, which operates "Call-a-Bus" for handicapped and Elderly persons on a demand-responsive basis, reports:

Cost per mile :	$ 1.25
Cost per hour :	$13.50
Cost per passenger trip:	$ 4.00

Delaware also has a demand responsive system that serves predominantly handicapped and elderly, with cost figures as follows:

Cost per mile :	$ .53*
Cost per vehicle hour :	$ 8.00*
Cost per passenger trip:	$ N/A

The characteristics of these two other systems and their service areas are similar to Denver's, with certain qualifying statements. The central New York system is more comparable to the RTD's combined service rather than just the HandiRide service alone. Both Central New York and Delaware serve many more elderly than handicapped/wheelchair patrons.

In comparison, the estimated total number of passenger trips carried by the Delaware system's 40 vehicles is 15,000 (only 600 of which are made by wheelchair-bound persons) and Central New York's 'Call-a-Bus' Group Trip Service system serves 6,900 riders per month, using four vehicles (only 200 riders are wheelchair-bound persons). The great differences experienced in the number of passengers carried per vehicle result from the varying sizes of the service areas and the different operating characteristics of the services (demand responsive vs. subscription).

Productivity Analysis

For purposes of this report, productivity will be measured in terms of passenger trips per hour. These are the two most commonly used productivity factors used in the transit industry.

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* Costs are considerably lower since operators are non-union.

Throughout the program, the following productivity ranges have been achieved;

HandiRide:
Passenger trips per mile: .09 to .14
Passenger trips per hour: .72 to 2.24

Special Elderly Service:
Passenger trips per mile: .44 to 1.43
Passenger trips per hour: 6.36 to 17.16

Combined HandiRide and Special Elderly Service:
Passenger trips per mile: .09 to .26
Passenger trips per hour: .72 to 3.49

Productivity measures for the month of October 1975 were:

HandiRide:
Passenger trips per mile: .10
Passenger trips per hour: 1.44

Special Elderly Service:
Passenger trips per mile: 1.25
Passenger trips per hour: 10.33

Combined HandiRide and Special Elderly Service:
Passenger trips per mile: .20
Passenger trips per hour: 2.33

These figures compare to .33 passenger trips per mile in Delaware and .34 passenger trips per mile for Central New York's "Call-a-Bus," and to five passenger trips per hour in Delaware.

Problems of Improving Productivity

One of the keys to improving the productivity of the elderly and handicapped services is a careful scrutiny of the characteristics of the markets this program currently serves and potentially could serve.

In addition to the cost per ridership analysis, RTD conducted a sociological and psychological benefits study and an economic impact analysis on users and non-users of RTD. "Among the handicapped users (of HandiRide), 36.0% mentioned their lives were better because of improved transportation. Also, 16.9% of the handicapped users mentioned that they were more independent now than before as compared with 9.1% of the non-users who mentioned this social element". The responses were varied but in most instances some form of social/recreational outing was mentioned.

"Furthermore, the benefit section clearly indicates that the provision of the HandiRide has had a very positive and sometimes dramatic impact on the attitudes, values and lifestyles of users. While it is not possible to translate these impacts into quantifiable benefits that can be directly comparable to costs, there is little doubt that the special needs program is providing numerous sociological, psychological and economic benefits to those persons lucky enough to have been selected to be served." (RTD HandiRide Evaluation Analysis)

The users (of HandiRide) generally feel that they lead better lives now than they did prior to the initiation of the service. Significantly, they feel that the service has lessened their transportation costs and made them more mobile with

PATRONAGE OF HANDIRIDE AND SPECIAL ELDERLY SERVICE

	February	March	April	May	June	July	August	September	October	November
HANDIRIDE:										
Total Passenger Trips	1,714	1,776	2,004	2,384	2,604	3,472	3,120	3,880	3,652	2,872
Subscribers Served	30	41	51	94	107	117	125	132	137	137
Wheel Chairs Served	16	21	22	35	46	50	56	59	59	59
Handicapped Served	14	20	29	58	60	66	68	72	77	77
Elderly Served	0	0	0	1	1	1	1	1	1	1
Persons Assisting	0	0	0	0	1	1	1	1	1	1
Trip Purpose										
Work	25	33	39	65	69	73	79	80	84	84
School	5	8	10	16	21	26	28	34	34	34
Medical	0	0	2	12	16	17	17	17	18	18
Shopping	0	0	0	0	0	0	0	0	0	0
Other	0	0	0	1	1	1	1	1	1	1
SPECIAL ELDERLY SERVICE:										
Total Passenger Trips*	--	586	3,476	2,948	2,920	4,216	3,104	3,748	3,544	3,280
Residences Served	--	16	24	28	28	31	32	32	34	34
Total Passenger Trips	1,278	2,362	5,520	5,332	5,524	7,688	6,225	7,628	7,196	6,152

* All are shopping trips.

less dependency upon peers and family. They also feel that their social life has improved because now they do not have to make as many demands on family members as they once did before the service began.

The major complaint of non-users of the HandiRide service is reflected in one respondent's comments. "Do you really want to know? It's just than I haven't got it (the service) yet. That's what I don't like about it."

The legality of using federal funds for non-accessible public transportation systems has been challenged in several states. It should be noted that MAD and other organizations such as Atlantis have consistently recommended that all new buses ordered by RTD be made accessible in order to accomodate individuals in wheelchairs. RTD has made some minor accessibility changes on regular transit buses, but to date, only the 12 FMC HandiRide buses contain wheelchair lifts. The most critical analysis of RTD comes from a feature article in the February, 1976 Senior Edition, a monthly publication for the elderly in Metropolitan Denver. Bob Moses, editor of Senior Edition and author of the article "Can the HandiRide Service?" says: "Ridership is extremely low. The frustration level of handicapped and elderly persons wanting (but unable) to ride the buses is high. The cost per passenger ride has been a constant source of friction between the advisory groups and RTD administrators." Lyle Peterson, formerly of the Denver Mayor's Commission on the Disabled states "the inefficient manner in which the (HandiRide) service is now being handled results in RTD having more applications. On the other hand, they are saying that they don't have enough applications to justify expanding the service because they have met 75% of the trips that have been applied for. That's a very contradictory statement. I've basically felt that RTD is dragging its heels."

The two RTD advisory groups MAD and the Elderly and Handicapped Advisory

Committee "appear unanimous in agreeing that the subscription system with routes planned manually a month in advance, is inadequate to serve the real transportation needs." A particular concern of MAD "is the way RTD has prioritized who among the disabled may actually use HandiRide." Peterson finds RTD's system of priorities an affront to the handicapped community and symptomatic of a society which foster feelings of inferiority on the part of the handicapped. "I don't think that the role of the transit industry is to say who or what is important to society. The role of the transit industry is to get people from point A to point B."

Many of the problems of the HandiRide can be explained by the simple statement that there are too few buses to serve too many people. When RTD had the option of buying seven slightly used FMC buses (like the ones they currently have) for $24,000.00 less than the current market value in December, 1975, the RTD Board turned it down.

Atlantis believes that the responsibility of providing mass transportation to all the citizens of the region, including the disabled, belongs to RTD. However, we believe that with interagency coordination, disabled input, centralization and revenue sharing, transportation services for the disabled can be provided more cost-efficiently and effectively.

The HandiRide evaluation listed several future policy alternatives. The Operations Committee presented to the RTD Board of Directors all of the policy alternatives. "The Operations Committee, and the citizens advisory groups (MAD and the Elderly and Handicapped Advisory Committee) are convinced that the HandiRide should not be terminated. We also are convinced that it cannot remain as is, but must continue to increase its scope of service." The report stated that continuing the existing service would cost RTD $570,000.00 per year, and that the budgeting impact of increasing the scope of the HandiRide service must be considered. In addition to filling a staff vacancy by a disabled person (accomplished in September, 1976) whose responsibility is to work with the elderly and handicapped, the Operations Committee "approved a $5,000.00 study to determine the feasibility and adaptability of pre-scheduling and a computerized system for the HandiRide." The computer study when completed would determine if random trips could be scheduled 24 hours in advance.

Additional recommendations include possible experiments in trasferring disabled passengers from one bus to another and in providing HandiRide to able-bodied individuals who were going to the same desitnations as the disabled. These two experiments were not conducted. "Staff also has been asked to evaluate the possible conversion of HandiRide to a zone system which of course, would require a certain amount of transfers by passengers going from one zone to another."

"A paper and pencil study was conducted by Dave Johnson, Coordinator of HandiRide, on May 5, 1976, utilizing names of HandiRide subscribers who were on file." Although some at RTD calculate that a rider increase could be achieved through the use of five zones, Johnson believes efficiency could increase by up to 50% by utilizing transfer and conducting test runs in the proposed zone system.

A study prepared by the American Public Transportation Association (APTA) described accessible transportation systems. As of March, 1976, there were 149 operational and 28 planned special transportation systems for the elderly and handicapped nationwide. There were seven other systems throughout the country that served more than the 8006 elderly and handicapped RTD served per month. Under close scrutiny, however, these figures are deceptive. Clients served tended to be mostly elderly and slightly disabled.

Some systems had one or two wheelchair accessible vehicles in their van or bus fleets and served considerably more elderly than disabled. In the study, 38 of the special service systems were sponsored by city and/or county governemnts, 11 through former model cities programs, 56 through private agencies and 70 through transit districts. The sources of subsidies were as follows: 54 of the projects were funded through the Administration of Aging; 58 through city and county taxes; 21 through State Department of Transportation funds; 2 through HEW grants; 7 through revenue sharing funds; 7 through UMTA Section 5 (operation) funds; 10 through UMTA Demonstration grants; and 3 through miscellaneous sources of funding. The APTA report did not include the Care-A-Van, a system in Ft. Collins, Colorado, nor the Center for Independent Living (CIL) in Berkeley, California. Both Care-A-Van and CIL operate excellent special transportation services for the disabled and elderly.

RTD has prided itself on having the best transportation system for the disabled in the country. While they were probably the best during their first year of operation, they are and will be lagging behind several other major cities if HandiRide is not expanded and regular transit coaches made accessible. The Bay Area Rapid Transit System (BART) in the San Francisco Area is accessible to the disabled, and a retro-fitting program is being undertaken by the Alameda/Contra Costa Transit District as a feeder system for disabled individuals who ride BART. The Southern California Rapid Transit District (SCRTD) Board of Directors on October 22, 1974, passed a resolution to the effect that all specifications for new buses would include provisions for the elderly and wheelchair handicapped. As a result of this resolution SCRTD with the approval of The Urban Mass Transit Administration will be purchasing 200 accessible standard buses. SCRTD "recently held a public hearing to discuss another application for the purchase of 320 additional accessible buses bringing the total to 520." Washington D.C. also has developed, at great expense, a totally accessible system.

URBAN MASS TRANSIT ADMINISTRATION

In theory, the right of the disabled to equal treatment in public transportation is recognized and guaranteed. Time and again, national legislation has affirmed this right.

The Urban Mass Transportation Act of 1964, as amended in 1970 by the Section 16(b) (a), declares it to be "...the national policy that elderly and handicapped persons have the same right as other persons to utilize mass transportation facilities and services."

The 1973 Federal-Aid Highway Act states "that federally financed public and mass transportation projects shall be planned and designed so that facilities and services provided can be utilized by elderly and handicapped persons as effectively as persons not affected."

In 1974, the National Mass Transportation Act was passed by Congress. This Act established an $11.8 billion six-year mass transportation program for both capital and operating assistance. The NMTA reaffirmed that elderly and handicapped persons have the same right to mass transportation as others, and provided through Section 16 (b) 2 grants to state and local agencies for meeting the mobility needs of the elderly and handicapped.

Again the 1974 Federal-Aid Highway was amended to include the following: "the Secretary of Transportation shall require that projects receiving federal financial assistance...shall be planned, designed, constructed and operated to allow effective utilization by elderly or handicapped persons who by reason of illness, injury, age, cogenital malfunction, or other permanent or temporary incapacity or disability, including those who those who are non-ambulatory wheelchair bound and those with semi-ambulatory capabilities are unable without special facilities or special planning or deisgn to utilize such facilities and services effectively.

The Secretary shall not approve any program or project to which this section applies that does not comply with the provisions of this subsection requiring access to public mass transportation facilities, equipment and services for elderly and handicapped persons."

In 1974 New York Congressman, Mario Biaggi, the man responsible for section 16 (a) of the UMTA 1964 Act, proposed amending the Department of Transportation appropriation bill so as to prohibit the use of funds for services that were not accessible to the elderly and handicapped. The amendment passed by Congress states: "None of the funds provided under this Act shall be available for the purchase of passenger rail or subway cars, for the purchase of motor buses or for the construction of related facilities unless such cars, buses and facilities are designed to meet the mass transportation needs of the elderly and handicapped."

On April 30, 1976, UMTA issued final regulations toward transportation for the edlerly and handicapped. Also on this date a joint UMTA and Federal Highway Administration (FHWA) issuance providing advisory information on urban transportation planning for elderly and handicapped persons were promulgated. "One intention of the final regulations is to make regular transit service more accessible to the large number of elderly and handicapped persons. This goal is widely supported by individuals and organizations that commented, in writing or in person, on the proposed regulation."

Despite these laws and regulations (in addition to Section 504 of the 1973 Rehabilitation Act) there appears to be a tremendous lack of direction and initiative on the part of most local transit authorities and Metropolitan Planning Offices (MPO) throughout the country providing public transportation to disabled individuals.

Mr. Dennis Cannon, transportation consultant with the Southern California Rapid Transit District states: "for all practical purposes, then, the decision (made by the UMTA amendments) to provide services to the elderly and handicapped, including those in wheelchairs, has been made. The question, therefore, is not whether to provide public transit for those handicapped but rather what type of service and how best to implement it."

While the disabled of Denver and no doubt throughout the country would like to share Mr. Cannon's optimism and feel confident that it is only the type of service that UMTA and local transit authorities are haggling over, a sense of caution tends to prevail. The conclusion of the Transportation Accessiblity section prepared by the White House Conference on Handicapped Individuals states that "six years after the passage of section 16 of the UMTA Act the consumer must yet remain vigilant. The battle for accessibility, indeed transportation in almost any form, has only just begun. Little progress in terms of facilities built or vehicles purchased has been made." Perhaps the right to public transportation and total accessibility to all transportation facilities for the disabled will be decided in the Supreme Court of the United States. Until this matter is decided, it is incumbent upon transportation planners, public and quasi public officials and disabled leaders to develop the most responsive, cost efficient system capable of transporting disabled individuals.

UMTA 16 (b) (2) Program

Section 16 (b) (2) of the Urban Mass Transportation Act of 1964 as amended, provides capital grants on a federal-state, 80%-20%, match to private non-profit agencies for the provision of services to the elderly and disabled. Each state receives a formula grant from UMTA that is distributed to an assigned state agency. In Colorado, the Division of Highways was assigned the responsibility of distributing $250,000 to the state planning regions where applications were submitted. The Denver Regional Council of Governments (DRCOG) has been assigned locally the responsibility of selecting the most promising applications by private non-profit agencies and insuring that they are consistent with federal, state and regional criteria. The legislation in part states that "projects funded by UMTA under Section 16 (b) (2) may be identified as deriving from local special efforts to meet the needs of wheelchair users and semi-ambulatory persons only to the extent that the following four conditions are met:

1. The service and vehicles serve wheelchair users and semi-ambulatory persons.
2. The service meets a priority need identified in the planning process.
3. The service is not restricted to a particular organizational or institutional clientele.
4. Any fares charged are comparable to those which are charged on standard transit buses for trips of similar length."

In a survey conducted by the Atlantis Transportation planning staff there were some serious questions raised about the compliance of last years recipients of 16 (b) (2) funds in meeting conditions one and three. Of the twelve community agencies receiving approximately 15 vehicles from UMTA, only one has a lift or for that matter even a ramp capable of transporting a wheelchair user.

While all the agencies we surveyed did not restrict the use of their vehicles to themselves, we found that insurance, licensing problems plus time schedules made it all but impossible for others to utilize their agencies. Wheelchair users calling the agencies for service were denied primarily because of inaccessibility. Most agencies only operate during their regular agency hours, 8:00 A.M. to 5:00 P.M., and are usually incapable of expanding services due to financial limitations. Since Section 16 (b) (2) provides only capital grants and not operational funds, operational expenses usually come from the agency itself or from a grant given to them by another agency such as the Office of Aging.

The one agency/one van approach, in operation in Denver and other communities receiving Section 16 (b) (2) grants, has not been effective in meeting the mobility needs of the disabled. A study by the Texas Transportation Planning Division on Elderly and Handicapped transportation in Texas (February 1976) states that "the greatest need (at this time) is for coordination among the many agencies investing time and money in transportation for the elderly and handicapped, and that increased attention be given to assuring that multiple transportation programs do not encourage fragmentation of service among multiple providers." In surveying the publicly reported transportation services for the disabled in New York, the results suggest that "the survey has highlighted a number of problems, particularly coordination. Virtually no coordination exists in administration or operation of existing services. A myriad of small operations exist, with differing eligibility requirements and different sources of funds."

The Care-A-Van transportation system, providing services to the disabled and elderly in Fort Collins, Loveland and adjacent communities, has developed a systematic approach to the problems of fragmentation and inefficiency. Care-A-Van utilized UMTA 16 (b) (2) funds combined with other sources. It provides door to door service to their clients with efficient transferring between buses for some. They also provide 24 hour subscription service in addition to immediate dial-a-ride service. A comparative study of Care-A-Van and five agencies providing services to transporting of dependent people undertaken by the Larimer and Weld County Regional Council of Governments "indicates that a specialized transportation system is not only able to carry more people in a typical month, but is able to perform the service more efficiently than fragmented services operated by seperate agencies."

As part of an intermediate range planning goal, the Atlantis Community submitted a proposal for UMTA 16 (b) (2) funds for the acquisition of 15 wheelchair accessible vans that will provide a systematic approach to transportation to disabled and elderly individuals. Going one step further than Care-A-Van and CIL which also operates fleets of UMTA supported vehicles, Atlantis has proposed that the 15 vehicles be coordinated with the 12 HandiRide buses for increased utilization and cost efficiency. We are hopeful that, if approved, this approach will be a model for Colorado and the entire nation.

Transbus

The transbus program was conceived by the U.S. Department of Transportation and the Urban Mass Transportation Administration to bring into commercial use transit buses that would provide better and more attractive service to the three major bus manufacturers (American General, General Motors and Rohr Indistries).

Disabled persons and organizations representing the disabled have attempted to include wheelchair lifts in the specifications for Transbus for several years. According to a news release issued from UMTA, Robert E. Patricelli, Administrator of UMTA, stated the new federal policy will provide for "advanced design buses which can be produced in a competitive market place." Patracelli stated the new design "will substantially improve the accessibility to the vehicle for all riders - especially for the elderly and handicapped." (Department of Transportation - UMTA release, July 22, 1976)

UMTA has made the determination that "new transit buses to be purchased with UMTA financial assistance and advertised for bid after February 15, 1977, must have front step rises which do not exceed eight inches in height, and must offer a wheelchair level change device as an option which transit authorities can order. The UMTA regulation on Transportation for Elderly and Handicapped Persons will be amended to insert this February, 15, 1977 effective date on the released provisions."

TOTAL ACCESSIBILITY OR DEMAND RESPONSE

One of the major roadblocks, aside from the fragmentation and inefficiency of current services, in providing transportation to the disabled has been the lack of direction and inability of local transit districts to make a decision on just what type of system they want to provide to the disabled.

Transportation planners and disabled individuals have wrestled with the question: Should a transit district provide a totally accessible system or a special door to door service for the disabled? While most disabled individuals and organizations would advocate both an accessible system and door to door service, there is great controversy when one has to choose between one or the other because of economic considerations.

The Southern California Rapid Transit District (SCRTD) has been a major proponent of a totally accessible system. "Beginning with a resolution issued by the SCRTD Board of Directors on October 22, 1974, we (SCRTD) have been actively pursuing the purchase of buses that are fully accessible to meet the immediate needs of these groups. ...We have recently held a public hearing to discuss another application for the purchase of 320 additional accessible buses, bringing the total to 520. We have, therefore decided that it is more important to design equipment to meet the needs of the disabled and asisgn it to regular routes giving these people the same right to mobility as the rest of the general public." Dennis Cannon, consultant to the SCRTD, believes there are many misconceptions about the disabled made by individuals in the transit industry. Cannon says "handicapped people are not more prone to illness than anyone else, and while some disabled do make regular trips to hospitals rehabilitation centers and doctors offices (and probably the incidence is higher than for the general population), the fact is that all available information indicates that the disabled have travel needs much like the able-bodied." Cannon believes that reports "which claims the handicapped do not want to ride the same vehicles as everyone else are biased. For example, he claims: "If anyone were asked, would you rather wait on a street corner in the rain or be picked up at your door? It would not be difficult to predict the response."

Many advocates of the totally accessible, fixed route system believe that more integration would take place on regular buses because special dial-a-ride services cater too much to the disabled and foster dependency on special buses. The advocates of a totally accessible system believe a demand-response dial-a-ride service is highly expensive. According to a report prepared by the Los Angeles City Demonstration Agency (CDA), dial-a-ride services "costs at least 30% more than a comparable level of service by fixed routes." As seen by the Atlantis disabled planners utilizing HandiRide, the subscription service offers little flexibility for meetings and other activities not prioritized by RTD.

Since the phasing in of totally accessible barrier-free buses would take 15 to 20 years, many hardcore supporters of the total accessible fixed-route service call for a retrofitting program. Retrofitting buses by providing an electro-hydraulic lift would make buses immediately accessible.

The 24 hour in advance subscription service as demonstrated by Care-A-Van and the Center for Independent Living (CIL) has increased productivity and flexibility for the disabled. Proponents of demand response also believe productivity and integration can be achieved if unoccupied seats on HandiRide and similar vehicles were available to able-bodied passengers. The results of the Naugautuck Valley Transportation District seem to confirm this.

In addition to the high costs for accessibility, many transit planners believe that time is an important factor to consider when planning transportation for the wheelchair disabled. Since one of the major goals is to get passengers from point A to point B as rapidly as possible, transit officials believe the disabled will slow down this process. The Franklin Institute Research Labs conducted a study to determine what manufacturers offer products for over the road mass transportation of the elderly and handicapped. Of the listed 25 entries of manufactured wheelchair lifts, nine had the capability of being lowered and raised (including recovery time) in 30 seconds or less. Target industries out of Springfield, Massachusetts manufactures an electro-hydraulic lift capable of being lowered and raised (recovery included) in 20 seconds. Clearly the efficiency of hydraulic lifts has improved from the time preliminary studies by UMTA and APTA began. We believe too that the state of the art of automatic tie downs and the like will significantly reduce the time from where a wheelchair user approaches the lift and is securely tied down.

UMTA and most local transit districts have stated that the major problem they have had is the lack of accessible buses. Although there were no entries for larger transit vehicles transporting 40 or more passengers there were nine entries for medium transit vehicles carrying 23 - 29 passengers; 14 entries for small transit vehicles carrying 22 or less passengers; 10 entries for shcool buses; and 23 entries for other vehicles. We believe that if none of the three federal contractors of "transbus" can meet the accessibility specification, local transit districts should look elsewhere for such vehicles.

The Atlantis transportation planning staff strongly believes that there needs to be a totally accessible fixed-route and a demand-response service to meet the mobility needs of the disabled. While a fixed-route system will undoubtedly lessen the need for demand-response service we believe there will always be a need for the latter service. For example, a severely disabled individual currently using HandiRide might, if curbs were cut and/or they lived close to a bus stop, use the regular service. An individual using crutches might have a harder time getting to a bus stop in the snow and ice than persons in the electric wheelchairs, and would be dependent on a demand-response service. In addition, if coordination existed between fixed-route buses and demand-response vehicles, transferring between system could be accomplished. Door to door service is important to the severely disabled who have some difficulty in inclement weather (water, snow and ice) and crowded conditions.

Although all the existing dial-a-ride systems throughout the country operate at a loss there are some indicators that the average operating cost per passenger trip may be going down.

MOBILITY AND TRAINING

Assisting disabled individuals in using mobility aids, overcoming psychological barriers such as fear of crowds and finding their way in new locations, should be looked upon for many severely disabled, particularly the multiply disabled, as a necessity. Although there are an increasing number of adaptive devices and equipment being developed, the information about them is not being disseminated to those who would benefit from them. An example is the "sip-and-puff" electric wheelchair, that can give a totally disabled individual mobility. A sipping and puffing action of the mouth controls the wheelchair.

Individuals who go out once a week or less due to inaccessible and/or costly transportation often are unable to think of places they would go to if transportation were available. CIL states, "It is even conceivable that he would respond to this question by saying that he could not think of any place he would like to go.

Incredible and pathetic as such as response may seem it is understandable when viewed in the larger context. People who have been immobile for many years simply have no idea of the impact mobility can have on their lives."

CONCLUSION

Despite the intent of federal legislation, RTD's HandiRide, Section 16 (b) (2) of UMTA, and the large amounts of money spent by public and private agencies for transportation services to the disabled, transportation remains one of the major problems of the severely disabled of Metropolitan Denver. Both a national and a regional mobility improvement program including door-to-door service, totally accessible buses, fixed rail systems, curb cuts, electric wheelchairs and van modifications must be dealt with to insure the right of the disabled to mobility.

Although the economic benefits that would accrue through jobs and the reduction of welfare costs would, as we earlier stated, justify a national transportation program for the disabled, the social benefits derived likewise provides a compelling reason to implement such a program.

When we consider that an estimated $3,000,000.00 is spent annually in the Denver Metropolitan Area for transportation services for the disabled, we are left to wonder whether a high initial cost to develop an accessible transportation program is indeed exagerated. We believe that through a comprehensive planning effort on the part of the Metropolitan Joint Regional Planning Program, the initiation of a State Department of Transportation Division on the Disabled and Elderly, and the implementation of the many recommendations that follow an efficient system of transportation can be developed to meet the mobility needs of the disabled.

Benefits

Ron Jones 'Cost Analysis of Alternative Transportation System for the Handicapped' is probably the finest paper dealing with the varied mobility needs of severely disabled individuals and the costs and benefits that society would incur to develop a national plan. The paper concludes "that a national mobility-improvement program should include curb modifications, door-to-door transportation surveys, the phasing in of the "transbus," limited substitutes for modified automobiles and vans, and the provision of power wheelchairs and mobility counseling to those persons needing them. The analysis indicates that such a program would cost approximately $5.6 billion in the first five years and would return substantial social benefits, including a $6.4 billion increase in the earnings of the handicapped."

Based on these figures, a Metropolitan Denver mobility improvement program would cost roughly $39,200,000 in the first five years and return in the form of earnings $44,800,000 in the first five years, as $5,6000,000 benefits to Metropolitan Denver. Although the Jones study is only the first major analysis, there are many costs such as the phasing in of "transbus" that would benefit all bus users, not only the disabled.

A former Vocational Rehabilitation counselor, who now heads an employment placement center for disabled individuals, stated in an informal interview with the Atlantis staff that numerous job requests for disabled workers cannot be filled due to inadequate transportation. Since RTD's HandiRide doesn't offer the flexibility to accomodate disabled individuals these job opportunities invariably go unfilled.

In addition to the economic benefits derived from a comprehensive improvement program, the non-economic benefits in the form of the reduction of emotional burdens created be immobility and dependency, and the reduced burden of the disabled on friends and relatives cannot be measured with a dollar sign. A comprehensive mobility improvement program would also reduce the stigma of disability and benefit non-disabled or temporarily disabled individuals.

RECOMMENDATIONS

The following is a comprehensive list of recommendations that Atlantis believes would significantly enhance mobility for the disabled. This list is not prioritized and includes some recommendations made by other transportation planners and experts throughout the country. We recommend:

1. The Denver Regional Council of Governments (DCROG), under their A-95 review authority, scrutinize every federal request in the region to assure accessibility. Not only should new buildings be accessible but all equipment, including buses purchased with federal funds.
2. That city governments develop public work projects that will cut or ramp curbs so as to enhance mobility for the disabled.
3. The Urban Mass Transportation Administration (UMTA) amend Section 16 (b) (2) to provide operational grants to non-profit organizations.
4. That UMTA disapprove all capital grant requests from public transit districts unless provisions are made for accessibility to wheelchair users.
5. That the Colorado Public Utilities Commission (PUC) regulate the prices of private wheelchair carriers.
6. That the Colorado PUC refuse any rate increases to private taxicab companies unless provisions are made for wheelchair users.
7. That taxicabs include several wheelchair accessible vehicles in their fleet.

These vehicles could be used by any caller but would be accessible to the disabled.

8. That the Colorado Department of Social Services, through regulations, establish the right to electric wheelchairs for severely disabled persons, who qualify for Medicaid.

9. That driver training programs be initiated for disabled persons through the Division of Rehabilitation.

10. That the Colorado Legislature create a State Department of Transportation, with a Division of Transportation for the Elderly and Disabled.

11. That RTD request that every new bus coming into the region be accessible to wheelchair users.

12. That should a rapid transit system be developed in Denver, RTD will immediately hire a consultant to assure that the system will be totally accessible to wheelchair users.

13. That RTD begin a retrofitting program with wheelchair lifts on their current bus fleet and push for more bus lanes in the region.

14. That city governments increase the number of handicapped parking spaces and meters in shopping and business districts. People who illegally park by handicapped meters should be fined and the money derived through these fines should be earmarked for curb cuts and or special transportation.

15. The State of Colorado should consider appropriating a small fraction of the state gasoline taxes for special transportation for the elderly and disabled.

16. That federal and state legislation be enacted that would provide tax credits for severely disabled individuals who utilize private wheelchair accessible vans for work because public transportation is not

available to them.

17. That the Colorado Division of Rehabilitation financially assist severely disabled individuals in purchasing or leasing vans.

18. That the Colorado Insurance Commission investigate inflated insurance costs placed on disabled persons.

19. That UMTA include specifications for a lift or power ramp on its 'transbus'.

20. That UMTA and HEW work cooperatively to fund service, demonstration and research projects that will enhance the mobility of severely disabled individuals.

21. That an established proportion of operational funds from Section 5 of the UMTA Act, be used for transportation services for the disabled and elderly.

22. That private community agencies assist severely disabled individuals on public assistance with a twenty percent match for the cost of electric wheelchairs.

23. That the Rehabilitation Services Administration and UMTA provide more research and demonstration funds for better electric wheelchairs and "curb climbing" wheelchairs.

24. Locate the Center for the Physically Disadvantaged at the Auraria Higher Education Center instead of the North Campus.

25. That DRCOG's Office on Aging, Denver's Commission on Aging and Commission on the Disabled pool their transportation resources into a centralized service.

EVEREST & JENNINGS
Marsh

Education

Chapter Seven Education

"We're not allowed to be independent, or intelligent."

Many severely disabled individuals have grown up during a time when there was little, if any, hope that they would lead independent lives. If they lived at home, their parents worried about their future and hoped that something would be built to "take care of" their disabled offspring before the parents died or became too aged to provide adequate care. Attempts at education were often half-hearted, because work for severely disabled individuals was limited to menial jobs such as counting and packaging fish hooks in a sheltered workshop. Dependency on relatives or parents, institutions or nursing homes provided little incentive for either teachers or students to strive for quality education.

Another segment of the disabled population grew up in institutions such as the State Home and Training Schools in Wheatridge and Grand Junction. Because of inadequate funds and/or incorrect diagnosis (as uneducatable) they did not have the opportunity to attend normal schools. That misjudgements were made has been demonstrated by several young adults at the Atlantis Community who, when removed from the institution, learned to read at 18 and 19 years of age. Living on one's own can be easier and complemented by a basic education. Atlantis has found that many severely disabled persons living at home, in a nursing home, or an institution, have not been involved in day to day activities such as personal budgeting, grocery shopping, traveling around the city, cooking, cleaning, and so on. Living on one's own requires basic skills such as reading and arithmetic to help them perform these and other tasks.

The Community College of Denver has attempted to assist disabled students through its Center for the Physically Disadvantaged. They often found that the deficiency in basic skills cannot be remediated by the staff of the Center. The general population is therefore forced to support a population of severely disabled people who are educationally ill-prepared to take advantage of available independence and vocational opportunities. Some disabled persons have received near normal education in special schools for the disabled. In the past such schools had higher academic standards and some students did gain admission to college. Once there, however, they found that they were unprepared to meet the 'normal' academic stress and had difficulty adjusting socially to their able-bodied peers. Conversations with the Directors of the Community College of Denver Center for the Physically Disadvantaged confirmed that disabled students educated at Boettcher (operated by Denver Public Schools) and other special educational schools were academically and emotionally far behind their able-bodied peers. Disabled students integrated into regular schools have not had the severity of these problems. According to the Director of the Auraria Center for the Physically Disabled, most disabled students that were educated in special schools are far behind other students intellecturally and emotionally even though they have normal intellectual capacities. The more restricted the school environment, such as the School for the Deaf and Blind in Colorado Springs, the more emotionally and academically handicapped the students become.

"Of the approximately 7 million handicapped children of school age in this country only 40% are receiving an education which is adequate in meeting their special needs. Only 25% of one million pre-school aged handicapped children are enrolled in an appropriate program. Additionally, 125,000 handicapped childred reside in institutions where educational services are underfunded and sometimes non-existent. Though handicapped children represent

10-12% of the school age population in this country, many have traditionally been excluded from public schools and forced into isolation in their homes or in institutions. Where they have been admitted to public schools, handicapped children have generally been relegated to separate classrooms 'out of sight' of the regular student body." (White House Conference on Handicapped Individuals Educational Concerns, DHEW, 1976).

According to a staff member of the Education Commission of the States, Colorado in the past has been one of the most progressive states in the country in providing educational services to the handicapped. Recently, however, Colorado has been surpassed by a number of states and has not taken an active role in mainstreaming handicapped children into regular public schools. At a House Sub-committee Hearing on the Education of the Handicapped Children Act, representatives from the Council for Exceptional Children stated: "At present, there are in Colorado a great many handicapped children who are not receiving an appropriate public education. Statistics gathered by the Colorado Department of Education, for the school year 1972-73, show that of the 91,060 children in the state only 34,388 or slightly more than one-third were receiving needed special educational services. The educational dilemma facing Colorado's handicapped children and their families has been considered sufficiently serious to lead to the filing of a class action Right to Education lawsuit in Federal District Court in Colorado." (Extension of Education of Handicapped Children Act. Hearing before Sub-Committee on Select Education of Committee on Education and Labor 1975).

Questions concerning education in the Atlantis Needs Survey summed up how disabled persons feel about their lack of equal education. Of those who would like to go to school (42), 36 would prefer attending with a mix of students. No one said they would like to attend a special school only with other disabled persons.

LEGAL CONSIDERATION

In 1971, parents of handicapped children represented by the Pennsylvania Association of Retarded Children contested in federal court the decisions made by local Public Schools Districts that their children could not learn and should be denied placement in public schools. The parents invoked the equal protection clause of the 14th Amendment of the U.S. Constitution which requires that a state provide a publicly supported program of education and it must be made available to all on an equal basis. As the result of this suit, the Pennsylvania State Board of Education and the local School Boards agreed to provide handicapped students with equal educational opportunities and due process hearings. The Mills vs. Board of Education Suit in Federal District Court in Washington D.C. provided another landmark decision that resulted in an order for all children in Washington D.C. to have access to a public school and an appropriate education program. In these two judicial cases "the Courts assumed that the most appropriate placement for all students is in the normal heterogenous classroom." (S. Goldschmidt, Mainstreaming Handicapped Children).

In response to these and similar court cases the Education of All Handicapped Act and amendments was enacted. It mandates, among other provisions, that each state educate handicapped children in the least restrictive environment; establish as a priority the creation of programs for handicapped children not currently receiving an education; and broadening the funding base by changing the grant program into an entitlement based on the number of children in ave average daily attendance. In addition to these mandates, it requires that each state develop an individualized educational program for every handicapped child. In addition, states will receive federal funds on the basis of the number of handicapped children who are receiving services from the state. Other specific provisions include assurance of extensive child disability identification procedures; assurance of "full service goals and detailed time tables; a guarantee of complete due process procedures; assurance of regular parent or guardian consultations; maintenance of programs and procedures for comprehensive personnel development including in-service training; assurance of non-discriminatory testing and evaluation; and a guarantee of policies and procedures to protect the confidentiality of data and information."

Criteria set by the federal government in response to Public Law 94-142, Education for All Handicapped Children Act, makes available two types of funding to individual states, "Entitlement" and "Incentive Grants." State entitlement is determined by multiplying the number of handicapped children between the ages of 3 and 21 who are receiving special services by a specified percentage of the national average per pupil expenditure. In 1976 this meant approximately $60.00 per pupil. Among the criteria set are safeguards and procedures to encourage mainstreaming and assure lack of cultural biases in testing. Incentive grants are given to states that provide services to children three to five years old, with a maximum grant of $300.00 per child.

MAINSTREAMING

It has been established that there is a legal obligation for public school systems to provide education to handicapped children in the 'least restrictive environment'. Mainstreaming has emerged as the solution to meet these obligations. Mainstreaming has been interpreted in many ways, from integrating special classes for disabled children into the same building used by able-bodied children, to full integration of disabled students into the same classroom with able-bodied students. Furthermore it provides, for their needs by using specially trained teachers and other specialists. A paper prepared for the 54th Annual Council for Exceptional Children stated: "Mainstreaming means the optimum intermingling on the broadest spectrum possible of people who are labeled exceptional or handicapped with children who are labeled normal, and to do so in a humanistic manner which tends to maximize the educational and social dividends for the community and students at acceptable cost, direct and indirect." (Minimum Conflict/Mainstreaming, Ed Awen). Although there are twelve different categories of handicapped children in the state of Colorado, most of the literature concerning mainstreaming deals with the mentally retarded or limited intellectual capacity categories. "It is the mentally retarded whose educational needs are currently receiving the most attention. This emphasis is particularly appropriate since mentally retarded, in contrast to blindness for example, is a broad, flexible, and ambiguous term that may accompany a wide range of learning problems and solutions. In this respect retardation is typical of the diversity and complexity of educational definitions the terms handicapped may encompass." (Administrative Implications of Mainstreaming, David Coursen.)

In a spot survey of 30 school principals within the Metropolitan area, conducted by the Atlantis planning staff, 13 responded to the survey. Of these, the principals in the suburban areas tended to mainstream more students than in Denver, but the majority stated that "that there were special schools such as the Boettcher School for the orthopedically disabled." Even the principals of schools with special educational programs stated: "There is a school that handles those kinds of people", (the orthopedically disabled).

In a telephone conversation between Atlantis Planning and a spokesman for the Colorado Education Association (CEA) it was apparent that from CEA's perspective mainstreaming was not working. The criticism basically was that there were too few in-service training opportunities for teachers and those that did take place were pretty much worthless. The in-service did help to "identify handicapped children but gave no assistance to teachers on how to best educate them. To most teachers in the metropolitan area, mainstreaming was associated with limited intellectural capacity and the emotionally handicapped student. There was no overt resistance toward mainstreaming the physically disabled student, but neither was there an active attempt to integrate them into the regular school.

"Many classroom teachers are untrained to deal with the special needs of these children in a regular classroom and many have negative attitudes about handicapped children. Further, they may be anxious about dealing with the attitudes and reactions of the other non-handicapped children in the class. In addition, some parents of non-handicapped children may hold ignorant or archaic views about handicapped children that classroom teachers will have to confront." (William C. Morris "Special Pupils in Regular Classrooms, 1971).

In a telephone conversation with one of the first physically disabled students who transferred from Boettcher to John F. Kennedy High School, on his own initive, it was apparent that he benefited from mainstreaming both academically and emotionally. He believed the challenge and the wider choice in academic subjects assisted him greatly in making this transition.

A spokesperson for the Muscular Dystrophy Association stated that many parents of orthopedically handicapped children had moved out of the Denver district in order to mainstream their children in other districts. On the other hand, as a spokesperson for Denver Public Schools said, there are many children from other parts of the state and region who come to the Metropolitan

Denver area so that their children can receive an education within the special education programs. For example, one of the Atlantis planners moved with her family from Texas to Denver approximately 30 years ago so that she could receive special education. This tends to confirm that while Denver was quite progressive in the area of special education, they are not now, when we consider mainstreaming as a major objective. While mainstreaming is the desired objective for disabled students, the longer a person remains in a special classroom, the harder it usually is for him/her to be successfully mainstreamed. By lowering the age that local school districts start providing services to handicapped children it would be considerably easier for mainstreaming to take place. In December, 1976, as this document was going to press the Superintendent of the Denver Public School System was fired by the Board of Education for several policy disputes among them that he "attempted to isolate handicapped children from regular schools 'against the wishes of the Board'."

Although there is no formal opposition to mainstreaming (few people will openly oppose "helping the handicapped") the attitude frequently expressed by teachers, parents of able-bodied children, and school administrators has tended to thwart this approach. Teachers and union representatives have fought hard to conduct their classes within an orderly framework without disruptive elements (i.e., the learning disabled and emotionally handicapped). Out of 933 physically handicapped students in the State of Colorado, only 30 are enrolled in Itinerant/Consultant Services, and only 41 are enrolled in Resource Rooms, for a total of 71 (7.6%) mainstreamed students. (Education of Handicapped Children, Status Report, Colorado Department of Education, Dec. 1975).

In a hearing before the State Board of Education in August, 1976, Carolyn Finnell, Atlantis education planner, recommended a viable plan by which severely disabled students could be successfully mainstreamed into public school classrooms. This plan included utilizing the model set by the Center for the Physically Disadvantaged at the Community College of Denver campuses, by using attendants to assist the physically disabled with activities in daily living, and providing other support services as needed. By dividing school districts into four or more zones, physically disabled students could cluster into one of several different schools making services more cost efficient.

Although special supportive services in the form of attendants, readers for the blind, interpreters, etc. will be necessary, tremendous advancements in the field of rehabilitation engineering can assist many severely disabled students in fulfilling their educational needs. For example, the numerous adaptive devices developed by the George Washington University Medical Center Job Development Lab have meant the difference between doing a task by oneself or depending on an attendant. Reachers, grabbers, electronic braille readers, one-handed typewriters and others enable severely disabled persons to function independently. By having a cluster of students in one of several schools within the district, the cost for special attendant care, and other supportive services are much more cost efficient. While little data exist on the social and economic benefits of mainstreaming vs. self-contained classrooms, particularly for the physically disabled, "a number of writers seem to agree, that mainstreaming, at least in certain forms, is less expensive than special education." (Administrative Implications of Mainstreaming, David Coursen.)

A number of models proposed by educators have been suggested for implementing mainstreaming. The cascade system developed by E. Deno, set up seven levels of educational organization based on levels ranging from normal classrooms to residential settings. This model has been adapted and modified slightly by the Jefferson County School District by seeking to place handicapped children in the least restrictive alternative. "This implied that to the maximum extent appropriate, handicapped children will be educated with children who are not handicapped and special classes, separate schooling or removal of handicapped children from the regular educational environment occurs only when the nature and severity of the handicap is such that education in regular classes with use of supplementary aids and services cannot be achieved satisfactorily." (Jefferson County Public Schools Summary of Pupil Personnel Services, November 1976).

Another model was introduced in the State of Oregon in 1971. This concept, referred to as Zero Reject System, places the responsibility for failure on the teacher and the educational program rather than on the disabled student. Teachers would receive training from specialists. Numerous other models developed by educators have been implemented across the country to make mainstreaming a reality. The Fountain Valley, California, Mainstreaming program has achieved an enviable reputation in this particular area.

Fountain Valley utilizes team teaching, differientiating staffing and individualized planning for all children in the 17 elementary schools in the district. All of the students have at least one special education resource teacher and the services of the support staff. In addition to these and other models, mainstreaming can be facilitated by the use of computer technology. Minimum conflict/mainstreaming is defined as an approach which utilizes computer technology to circumvent such structure obstacles to mainstreaming as transportation, scheduling, screening and assigning students, testing and grading. It is noted that minimum conflict mainstreaming has the advantages of reducing clerical loads, preventing waste in financial and educational areas, and freeing human and mechanical resources for use in the teaching and learning process.

According to the authors of Minimum/Conflict Mainstreaming, the impediments to mainstreaming such as negative attitudes, detrimental effects of labeling, and lack of teacher support systems likewise can also be eliminated through the use of technology. The Center for Study in Vocational and Technical Education at the University of Wisconsin, Madison has carried on a number of activities statewide (workshops, exhibits, publications, bibliographies, and films) aimed at modifying regular programs to allow participation of disabled students.

STATE AND LOCAL INVOLVEMENT

The Colorado State Handicapped Children's Education Act of 1973 declaired: "the General Assembly, recognizing the obligation of the State of Colorado to provide education opportunities to all children which will enable them to lead fulfilling and productive lives, declares that the purpose of this article is to provide means for educating those children who are handicapped. It is the intent of the General Assembly, in keeping with excepted educational practices, that handicapped children shall be educated in regular classrooms, insofar as is practical and should be assigned to special education classrooms only when the nature of a child's handicap makes the inclusion of the child in a regular classroom impractical. To this end, the services of special education personnel shall be utilized within the regular school program to the maximum extent permitted by good educational practices, both in rendering services directly to children and providing consultative services to regular classroom teachers." Despite this declaration, it is a common procedure in the state to place physically disabled persons who have normal intelligence but who are in need of attendant care in self-contained special classrooms. Even though representatives from the Atlantis Community participated in hearings held by the Colorado Department of Education in August, 1976 in regard to the rules for the administration of the Handicapped Children's Education Act, the comments and recommendations Atlantis made were not accepted. In Denver a physically disabled person in a wheelchair who needs any kind of assistance in activities of daily living is automatically sent to Boettcher School because they, "have facilities to care for their physical needs." In conversations between Atlantis and Mr. Ted White, Director of Special Education in Denver Public Schools, Mr. White had a relatively hard time grasping the fact that just because an individual needed help with his personal needs or physical aspect of his class work, that he/she did not necessarily need to be in a self-contained special classroom. The Atlantis planning staff explored the possiblity of having special classes within regular schools such as in some of the Scandinavian countries. It is used as a gradual means of mainstreaming severely disabled into regular classroom situations. Disabled children spend part of the day in the regular classroom and likewise able-bodied children spend part of their classes in the special education room. This carries through so that special education teachers trade off with some of the regular classroom instruction. In this way there is a gradual process of exposure in education. This concept is being practiced in Denver, but not for severely disabled in wheelchairs. Fairmount Elementary School has such a program for mentally retarded children and Sabin Elementary School has a program for profoundly retarded individuals. At Fairmount, the younger children pretty much stay in their own classrooms, except for gym and lunch, but the upper grades send students into the regular classroom for art, reading, and math. This mainstreaming continues throughout the students education years from Fairmount and on to Byers or Baker Junior High which have similar programs. From there the student can continue with the program at West High School. When asked if they had students in wheelchairs going to Sabin and Fairmount, the principals said they did not because of the architectural barriers (stairs).

The Colorado Handicapped Children's Education Act at first glance appears to be committed toward mainstreaming. There are however, far too many loopholes excluding the disabled from the regular schools. All affected children are lumped together in the amorphous category of handicapped with no distinction made between the ability to learn and participate among able-bodied peers.

In a presentation before the Colorado State Board of Education in regard to implementing rules and regulations of the Handicapped Children's Education Act of 1973 an Atlantis spokesperson recommended that: "The age of handicapped children be extended from five to twenty-one to the ages of birth to twenty-five (as in the State of Michigan Public Act 198, 1971); that handicapped individuals regardless of their disability or disabilities should be educated in regular classrooms; that the Colorado Board of Education look toward the Community College of Denver Center for the Physically Disadvantaged as a model in providing supportive services to the disabled; Affirmative Action be undertaken by the Colorado Board of Education and the State Department of Personnel to hire more disabled individuals in public schools; increased specialized training by disabled individuals be given to all teachers in Colorado schools; and attendant care must be provided to any disabled student in need of such care so that he/she can be educated in a regular classroom." (Presentation of Atlantis Community before the Colorado State Board of Education, August 1976).

The six members of the Atlantis planning staff who attended Boettcher School all believe that Boettcher totally sheltered them from the real world and did not prepare them for higher education let alone independent living. Perhaps the biggest criticism was that segregated special education classrooms limited their social experiences and made normal socializing experiences often traumatic. The overwhelming responses of rehabilitation and educational counselors tend to verify that special education schools such as Boettcher inhibit disabled individuals both academically and emotionally. In addition, able-bodied persons are sheltered from disabled which furthers misunderstanding, myths and fears of the disabled population.

In a letter sent to Representative Leo Lucero, Chairman of the Colorado Interim Education Committee, Ingo Antonitsch, Executive Director of the Commission on the Disabled stated "I have talked to far too many disabled individuals who have been scarred by segregated schools to believe physically and multiply handicapped children should be placed anywhere other than in the regular classroom. I am hopeful the Colorado Interim Education Committee will amend the Handicapped Children's Education Act to promote the mainstreaming of handicapped children into public schools." (Letter to Representative Leo Lucero, August 31, 1976, Ingo Antonitsch, Director of the Mayor's Commission on the Disabled).

A multiple handicapped student is a student that has one or more disabilities. This may mean a physical and mental handicap or two physical handicaps. Information on the number of non-retarded, orthopedically disabled students mainstreamed into regular public schools within the Denver Public School system has been difficult to obtain. Staff members from Denver Public Schools say that many disabled children do not identify themselves as disabled and are not included in those mainstreamed in public schools. On the other hand, an able-bodied person who breaks a leg playing football and is temporarily confined to a wheelchair may be considered physically handicapped. Although statistics on the mainstreaming of orthopedically disabled children are neither clear or totally accurate, it appears as if Adams, Arapahoe, and Jefferson Counties mainstream more students than does Denver.

EXAMPLE OF EDUCATION FOR THE DISABLED IN DENVER

Boettcher School

Boettcher School provides schooling for the physically handicapped from kindergarten through twelfth grade and is operated by the Denver Public School system and funded by the State of Colorado Special Education Office. There are three types of diplomas the students graduating from Boettcher can receive: the regular diploma awarded to students who have completed 150 hours in junior high school and 150 hours in high school; the modified diploma for those students not academically oriented and includes those involved in workstudy program; and the certificate of attendance given to those individuals who have been educated and have regularly attended school through the twelfth grade.

The work-study program at the Boettcher School was developed through the aid of an extensive testing device developed by Dr. Hester of the Goodwill Rehabilitation Center of Chicago. The Hester test (mentioned in more detail in Chapter Eight on Employment) is a test that measures mainly dexterity, perception and intelligence. Scores from 1 to 6 (six being the most proficient) are given on the basis of ability. The computed scores are then sent to Goodwill Rehabilitation Center and a computed listing of available jobs is printed. Mr. Eugene Graham, principal of Boettcher School, and Mr. Peter Gingress, Instructor at Boettcher, felt the work-study program was very successful and reported that nine of the eleven students in the work-study program who graduated in 1975 were employed. One of the negative aspects of the work-study program at Boettcher is that it is compulsory for students in the eleventh and twelfth grades to participate in this program. This does not take into account the individual differences and academic background and development. The positive aspect is that it gets the person out into the community and helps build confidence in the ability to work.

A problem with Boettcher is that it places students in grades according to chronological age rather than intellectual ability. Several of the students now at Boettcher have been deprived academically as a result of growing up in institutions and other schools and are far below their academic potential. Students just learning to read at age 18 and 19 will no longer be able to attend school after they become 21, due to the Colorado Foundation Act. Just when they are beginning to realize some of their potential they are shut off from learning. In some cases the Emily Griffith Opportunity School has picked up such people and provides some basic education skills in addition to vocational education. Atlantis believes that if these people have a chance to continue their education beyond age 21 they will have a much greater potential to reach higher academic and vocational levels. Individuals may be considered high school graduates even though they cannot read or perform simple mathematical problems. Hopefully by reducing the initial educational age from five to birth through an early intervention program and extending the age to twenty-five, as the State of Michigan does, those persons deprived of an education will be able to receive compensatory services through the school districts.

The Denver Cerebral Palsy Center

The Denver Cerebral Palsy Center serves 130 students from three years of age and up, from Denver, Adams, Arapahoe, and Jefferson counties. They have programs ranging from preschool and kindergarten to pre-vocational and workshop acitivities. Sources of funding come from the United Way and the Community

Centers for the Mentally Retarded and the Seriously Handicapped. The academic level of the program ranges from nursery school to third grade. A social worker for the Cerebral Palsy Center in a meeting with Atlantis said that if a child could function above that level, they usually tried to place the student in another educational program.

The Cerebral Palsy Center places students in Sabin Elementary School, Hope Center, Laradon Hall, and Boettcher School. However, there is a lack of available placement for the child in a wheelchair.

Community College of Denver Center for the Physically Disadvantaged

The Centers for the Physically Disadvantaged provides supportive services for disabled college students wishing to mainstream into classes throughout the three campuses of the Community College of Denver. The Program is funded through the Colorado State Board for Community Colleges and Occupational Therapy in the amount of $308,000 for fiscal year 1975-76. A new facility is being built at the north campus and will be ready for occupancy in May, 1977. Community College of Denver is expected to extend services to the University of Colorado at Denver and Metropolitan State College for the 1977-78 college year on a limited basis. The program is now being used as a prototype in Wisconsin, Washington, and Florida. Among the over 100 supportive programs and services provided by Community College of Denver, the following are included: special typewriters, braille reference library, textbook outlining service, tutoring, attendant care and complimentary typing service.

Sewall Rehabilitation Center

The Sewall Preadmission Opportunity for Rehabilitative Therapy (SPORT) is an early intervention program for developmentally disabled preschool children.

SPORT is an extension of an existing program at Sewall titled Sewall Early Educational Developmental (SEED) which was established to demonstrate the effects of early therapeutic and educational intervention on developmentally disabled children from age six months to three years of age. SPORT has four primary objectives:

1. To promote optimum development of the developmentally disabled child through intervention and individually programmed therapeutic and adaptive techniques.
2. To reduce family disfunction and maladaptive behavior and improve parent child relation through provision of a parent program.
3. To expand Sewall's multidisciplinary model to public and private failities and prepare early childhood education and allied health personnel to implement a multi-disciplinary approach to developmental childhood education.
4. To develop a systematic and effective method for assessment of community programs dealing with developmentally disabled children (Sewall Rehabilitation Center, SPORT Brochure, 1976). Early results of SPORT indicate that early intervention is effective in reducing insititutionalization and does enhance mainstreaming.

Metro College for Living

Metro College for Living is a program developed through Metropolitan State College that provides classes in community living skills. There are opportunities for the students involved to mix with other students and gain normalization and socialization skills. The program is funded in part by the Colorado Division of Developmental Disabilities and serves primarily the developmentally disabled.

Atlantis believes the College for Living should be a model for developing community living skills for the severely disabled.

RECOMMENDATIONS

1. Adult Basic Education. Such a program could potentially be sponsored by the Emily Griffith Opportunity school and would have one qualified teacher to diagnose, plan, and monitor each student's learning program. The program then could use volunteer special education students from area colleges to work on a one-to-one basis with each student under the direction of the teacher. The goal would be to bring the student up to an academic level where he/she could function and benefit in a regular peer class setting.
2. Develop a state-wide Early Intervention Program that would meet the educational and health needs of very young (six months) disabled children and prepare them to enter regular classrooms. Once the child enters the regular classroom, supportive services including attendant care would be provided to assist with his/her basic activities of daily living. In addition, specialized equipment such as tape recorders and electric typewriters would be available to minimize the disabled student's limitation and maximize his/her capabilities.
3. Establish centers, modeled after the Community College of Denver Center for the Physically Disadvantaged that would offer the support services necessary for the disabled student to function within the normal classroom without unnecessarily inconveniencing the teacher and other classmates.
4. The Denver Public School System and the Colorado Department of Education should actively encourage the mainstreaming of disabled students into public schools.

5. The Denver Public School System should extend the age of education to those disabled students deprived of basic learning skills.

6. The Colorado School system should hire more qualified disabled teachers for all levels of education.

7. Increased training should be made available for regular classroom teachers on the needs of the physically disabled.

8. Attendant care should be included for disabled children as part of their education needs when necessary.

9. Explore the feasibility of utilizing computers (as mentioned in Minimum/Conflict Mainstreaming) for mainstreaming disabled children into regular schools.

10. Extend the age of disabled students served by the Colorado State Department of Education from birth to twenty-five.

11. The Federal Bureau of Education of the Handicapped should generate more research and evaluation grants to enhance mainstreaming disabled students into regular schools.

Employment

Chapter Eight Employment

"I want to work because I think there's something I can contribute."

The Urban Institute, in its Comprehensive Need Study, sampled 889 persons whose files had been "closed out" by their vocational rehabilitation department of their states because of the severity of their disability. Ranked as the number one need by the closed out persons was vocational placement. The Atlantis Needs Survey shows that of 60 severely disabled persons questioned, 59 are seeking employment, of those, 19 are actually employed and only 4 are employed full time. Despite the expressed desire for employment and the tremendous emphasis society places on work and productivity, the disabled are among the most underemployed and unemployed groups in America. The Urban Institute states, "Ours is an economy which creates jobs and allocates people to them largely by the market mechanism emphasizing productivity. While some humanitarian concerns often mitigate concerns for pure efficiencv, we as a society do not generally argue for the creation of a job for anyone who wants it. This being the case, it is necessary to accept the bitter concomitant - that there are many who could contribute something to social productivity whose offer is rejected. We do not want everyone who could work at some level to do so."

The problems of unemployment stem not so much from the unwillingness of disabled persons to work, nor from the extent of one's disability, as it does from lack of worthwhile jobs. Traditionally, people have had to fit the job rather than jobs fitting the people. This is basically the root of the problem as reflected in much of the literature on the subject. Job development and job placement of the severely disabled person calls for a united creative effort. Two examples of severely disabled persons involved in Atlantis will illuminate this point:

D.J. is a severely disabled individual (cerebral palsy spastic quadriplegia) who spent most of his life at the Ridge State Home and Training School. Until moving into the Atlantis Community Residential Center in June, 1975, he worked several years performing tasks requiring fine dexterity in sheltered workshop situations. He made approximately $10.00 per month full time on a job counting and packaging fish hooks. The physical nature of his job in addition to the low pay caused tremendous sense of inadequacy and frustration for him. D.J. is now employed at the Atlantis Early Action Center as a laundry worker. He travels in his electric wheelchair among the eight apartment units of Atlantis gathering clothes in a box and taking them to a washing machine at the Center's Office. Since he cannot do the folding himself, another disabled (blind and mentally retarded) person assists him. Beside doing the laundry for Atlantis, D.J.sweeps the walkways to the apartments clear of snow. With a shovel angled against the snow he uses his electric wheelchair in the same manner as a snow plow in clearing the snow away.

R.C. is a severely disabled woman (muscular dystrophy, fredrich ataxia quadriplegia) who worked on and off for a period of years at the Jefferson County Community Center workshop. She too did jobs requiring physical dexterity despite her severe disability. She now coordinates the Atlantis Aide Line, a resource link for the disabled to the services of Atlantis.

Most of the residents of the Atlantis Early Action Program and satellite apartments are similarly employed. In most sheltered workshop situations, disabled persons must compete physically by performing manual functions such as counting fish hooks and are paid according to what they count (as low as $.10/hr.). This forces the disabled to compete against what a hypothetical able-bodied person would count and places the disabled in a no-win situation. Their physical inability is stressed rather than their mental capability.

Because of the disincentives associated with working and maintaining medical benefits, attendant care and SSI payments, Atlantis can only pay $65.00 per month to these individuals. The alternative to public assistance is to secure a job that pays well enough to cover the high costs of transportation, insurance, attendant care and other needs. A spokesperson for the Rehabilitation Services Administration, at a meeting with the Center for Independent Living staff, suggested that such a person would need to earn $15,000 per year or more to live independently. Since there are relatively few severely disabled persons making such a salary, most are either living on a deficit budget or are on public assistance.

A few examples may be appropriate. One is of a severely disabled woman who works as a social worker. Although not on public assistance, she spends anywhere from one-third to one-half of her total income just on attendant care. Another is a person who is working full time, making $3.25 per hour; although not on public assistance she spends $150 per month just for transportation. Insurance for the severely disabled individual can be difficult to obtain and, if obtainable it is expensive. (See Chapter Four, Medical Services) There are many other cases in which people are spending one-half of their income or more on basic necessities such as transportation and attendant care.

Social Security and the State Rehabilitation Program have developed a "self support plan" whereby a client of both agencies can earn up to $333 per month and still retain SSI and Medicaid, on the condition that he or she saves the major part of that sum for a device or service that will enhance employability. Only seven people of the Atlantis survey sample of 60 ever heard of the self support plan. None have been or are now involved in the plan.

Within the last few years several national studies have been undertaken to determine the relationship between disability and the labor supply. According to the Comprehensive Needs Study, "These studies found that disability consistently reduces the labor supply regardless of the measure used to estimate the labor supply or disability. Disabled persons have labor force participation rates that are 5 to 25 percent lower than rates for comparable non-disabled persons."

A breakdown of 595 severely disabled persons who receive services from Comprehensive Medical Rehabilitation Centers (CMRC), according to the Urban

Institute, indicates that the higher the Barthel score (a gage determining physical functioning and dependency) the higher the employment. Of the 21 individuals with a 0-20 Barthel score, none were working. Of the 76 severely disabled persons with a 21-61 score, only one was working. 55.3% of the sample who were working had a perfect Barthel score.

In a study conducted by the University of Wisconsin - Stout, concerning placement services in vocational rehabilitation programs, the authors note that 14.8% of the FY 1973 rehabilitation clients had no earnings at the time they were closed out. The average weekly income of a FY 1973 rehabilitant with earnings was $88.65 compared to an average weekly income of $144.32 in the total labor force. A longitudinal study comparing disabled workers and youths confirms that the disabled workers were working for considerable lower wages than other workers.

The University of Wisconsin, in two unpublished studies mentioned in the Comprehensive Needs Study, concludes that the demand for disabled workers on the part of employers is significantly lower than for able-bodied workers. "The disabled generally belong to the secondary labor market, which is characterized by lower wages, lower skill levels, fewer opportunities for advancement and more frequently part-time and part-year work than the primary labor market." The Wisconsin Study suggests that the secondary labor market is somewhat accessible to the disabled, but due to the lower wages, lack of promotion and inadequate benefits has not been an adequate placement for the severely disabled. As the study suggest, "The goal of vocational rehabilitation should be a job in the primary labor market."

Using data from the Rehabilitation Services Administration, (1970 clients), it was found that 18.1% of the rehabilitants were placed in unpaid household work situations and sheltered workshops. Wages and advancement were even below the secondary labor market. A total of 51.6% of the 1970 rehabilitants were in the four lowest paying occupations compared to 22% of the general working population.

The experience of the Atlantis Planning Project has provided much on the spot information about the disabled and the problems of employment. The Atlantis Board of Directors unanimously agreed that in addition to fulfilling the planning criteria set by the City of Denver Community Development Administration, the secondary objective was to involve disabled individuals in the planning process. To fulfill this goal, the Senior planners interviewed 35 disabled persons and hired 14. Each person was assigned to a team, and all but three had a special area to cover for this report.

BARRIERS TO EMPLOYMENT

Architectural Barriers

The most obvious barriers limiting employment for a severely disabled person are architectural barriers. Many jobs are out of reach for disabled individuals only because buildings have been designed that make accessibility for the disabled virtually impossible. Steps and curbs are often insurmountable obstacles to an individual in a wheelchair. Despite Public Law 90-480, the Architectural Barriers Act passed by Congress in 1968, which states that buildings constructed with public funds are required to be totally accessible to all persons, many new buildings utilizing federal funds are not accessible.

Education Barriers

The strong relationship between employment status and education cannot be underestimated. A sample of 302 severely disabled individuals who were receiving services at Comprehensive Medical Rehabilitation Centers showed that the education level was a major influence on employment status. Of those individuals who were employed, 92.3% had completed at least 11 years of school. The study indicated that the higher the level the greater the rate of employment. Although the Atlantis Needs Study shows that congenitally/developmentally disabled have higher educational levels than individuals disabled during or after the developmental period, this needs to be qualified. For example, two severely disabled individuals living at Atlantis spent the major parts of their lives at Ridge and Grand Junction State Home and Training Schools. When they moved to Atlantis in their late teens neither could read. Both were enrolled in special education schools in the Metropolitan area and "graduated" from high school, though they were both reading at elementary school levels. Even though many non-disabled persons graduate from high school without ever learning to read, the proportion is not as great as the young disabled graduates. Non-disabled individuals usually have not been deprived of social experiences and have the capacity for physical work. The latter point is important because if severely disabled individuals have fewer employment options than able-bodied persons, education takes on increased significance.

Social Barriers

Closely related to educational barriers are social barriers. Special segregated classrooms, as noted in Chapter Seven, Education, handicaps persons both academically and socially. One of the counselors at the Community College of Denver, Center for the Physically Disadvantaged (CPD) believes that the social and emotional damage done to the disabled that have been educated at a special educational school is extremely significant. She stated that even though

CPD was not segregated, many of the severely disabled students completely isolate themselves from their fellow students. Architectural and transportation barriers also isolate the severely disabled from the mainstream and reduce their scope of social contact. Those severely disabled persons who have been institutionalized or homebound have not, in all probability, developed the social skills needed to function in a competitive job situation. The lack of social contact, as pointed out by the University of Wisconsin - Stout Studies, is a major barrier to employment in that almost two-thirds of professional jobs and one-half of blue-collar jobs are acquired through social contacts including friends, acquaintances, and relatives. The need for social rehabilitation is stressed in this report.

Psychological Barriers

Segregated and sheltered environments in which most congenitally disabled persons are raised, limit their social experiences and give them a sense of being "freakish". The lumping together of mentally retarded individuals with physically and multiply disabled persons has been common in special educational schools, workshops, recreation activities and group homes. For the severely disabled person who has been placed in sheltered workshop situations, where physical dexterity and coordination are the major criteria for success, strong feelings of frustration and inadequacies result. Several of the severely disabled residents of Atlantis have previously worked in community sheltered workshops. These individuals generally had good work attitudes and a desire to be productive. What bothered them more than working for only $10.00 or so per month was the fact that many of their co-workers who did not have problems with their upper limbs made considerable more money without working any harder.

After seeking employment that never comes, the severely disabled person is likely to give up and enter the ranks of discouraged non-workers. The "body beautiful" image reflected in the playboy philosophy, that so many American people have embraced, is also a barrier by which severely disabled persons are refused entry into the labor market.

Attitudinal Barriers

Despite the many abilities disabled persons possess, the improved technology available to compensate for functional loss, affirmative action regulations, rehabilitation counseling and services, and public education campaigns, employer attitudes have not changed. The decision to hire or reject a qualified disabled applicant may rest on a number of fears, biases, myths and economic considerations. Of 35 disabled persons who interviewed for positions on the Atlantis Planning Staff, all but two experienced what they considered to be discrimination in trying to secure a job.

According to the Comprehensive Needs Survey; public relations campaigns to promote employment opportunities for the disabled have not been very successful. The Colorado White House Conference on the Handicapped Position Paper disagrees, and encourages disabled groups to develop more such campaigns. Disabled people do not have the flexibility to switch from one job to another as does an able-bodied person. Transportation, special equipment, lack of compatible jobs all help create this situation. This lack of flexibility was the major factor employers cited in refusing to hire disabled people. Economic costs incurred for physical examinations, health insurance premiums, and training also discourage employers from hiring the disabled. Speech impediments, foreign devices like catheters, electric wheelchairs, and the whole "body beautiful" image appear to have tremendous negative influence on employers who have limited experience with disabled persons.

The Comprehensive Needs Study reports, "Virtually all of the studies on employer attitudes have found that large proportions of employers do not favor hiring disabled people. There are strong indications that these attitudes are in large parts based on non-rational, negative feelings, prejudice, rather than on realistic fears of low productivity, high absenteeism, or high insurance rates."

In a survey of 108 Minnesota employers, C. Arthur Williams concluded that employers do not view hiring the handicapped as good business. The deterrent most cited by these employers was lack of flexibility, added cost for physical examinations, absenteeism, paid sick leave, promotability, and medical and disability income insurance. Additional factors cited were costs incurred in hiring, training, placing, and in making physical changes assuring accessibility. And finally, there were potential costs to employers in the form of workman's compensation, absenteeism and low productivity. In an earlier survey of employers who had hired disabled workers, the Federation Employment and Guidance Service concluded that a third of the employers believed that disabled workers were better than non-disabled, one-half believed they were more conscientious and 60% believed the disabled were less prone to quitting than the non-disabled.

Transportation Barriers

The lack of available, accessible and affordable transportation is one of the major problems affecting employment for severely disabled persons. In the Urban Institute Study "Almost 41% of the vocational rehabilitation clients sampled felt they would need transportation services to go to work." (Urban

Institute Study) In 1971, Judge Sherman Finesilver of Denver working under a grant from the Department of HEW stated that the Department of Transportation estimated there were 1,439,000 employable transportation handicapped persons in the United States and that of these, 103,000 are transportation sensitive unemployed. If each of them could be made mobile and returned to work, it is estimated that the annual earnings of $452,692,000 would be generated.

In the 1969 ABT study it was indicated that "13% of the unemployed handicapped said they were unemployed because they had no way to get to work; 16% said their unemployment was due to the high cost of transportation and 42% said it was difficult to get to work and back." (ABT Associates, 1969) In another study conducted by ABT "14% of the persons who completed a vocational rehabilitation program and obtained employment later became unemployed because of transportation problems and 16.5% of all persons who receive vocational rehabilitation services are unemployed because of transportation problems."

REHABILITATION ENGINEERING

Bio-engineering or rehabilitation engineering has made it possible for severely disabled individuals to participate in literally hundreds of activities that were previously inaccessible to them. For example, adaptive devices developed by rehabilitation engineers enable severely disabled persons to operate telephones without using their hands, to operate electric wheelchairs by their chin or mouth, and write on one handed typewriters. Severely disabled persons have also developed simple devices to enhance their independence. For example, many door knobs are inoperable to quadriplegics, but one woman in Atlantis demonstrated that with a certain amount of ingenuity a simple Lincoln Log and a circular radiator hose clip can make the difference between a door that can or cannot be opened.

There are punch presses and other machines that have been developed abroad that can be operated by the most severely disabled persons. All that is required for operation is a slight contact, or a gross motor movement touch. There are numerous rehabilitation engineering firms across the country that have been making a tremendous impact in providing adaptive devices and equipment that have enhanced employment for the disabled. The Job Development Laboratory of the George Washington University Medical Center in Washington D.C. is perhaps the most notable. They have redesigned work environments and provided special adaptive equipment to make more jobs accessible as well as training for those homebound. The Center has trained numerous homebound persons in the telecommunications and information technology fields. Such jobs, which pay anywhere from $2 to $8 per hour, include: computer programing, microfilm equipment operator, data input operator, bookkeepers, abstractors, proof readers, statistical analysis forecasters, remote insurance claims adjusters, remote data entry operators, para-reporters and others.

At the Comprehensive Vocational Rehabilitation For the Severely Disabled Person's Conference in December, 1975, Mallik reminds the conferees (mostly rehabilitation professionals) that they must be looking for new employment possibilities. Additionally he states, "the training we provide must be constantly reviewed to insure that it will equip our clients with a reliable skill that is and will be in demand."

SPECIAL PROGRAMS

CIL Computer Training Program (CTP)

The Center for Independent Living (CIL) in Berkeley, California, runs one of several computer training programs (CPT) for severely disabled persons. At a visit to the Center in June of 1976, three members of the Atlantis Planning Staff visited the CTP which is funded by a grant from the California State Division of Rehabilitation and supported by numerous Bay area businesses, most notably IBM. Modeled after a computer training program in Virginia, CIL originally contacted the business community, specifically data processing and business centers, and established a Business Advisory Council. Two severely disabled persons teach computer programming and also serve as role models. The students, all of whom are severely disabled, are average or above in intelligence, and have exhibited a very high level of motivation. Support services, a very necessary indegredient in the success of the program, is furnished by CIL, and up-to-date technical assistance is provided by the Business Advisory Council. Despite very severe disabilities, all the students, according to their instructors were "infinitely trainable and infinitely placeable."

Human Resources Center

The Human Resources Center of New York founded in 1952 by Dr. Henry Vascardi has been concerned with providing employment opportunities for severely disabled individuals in business and industry. The Human Resources Center offers tuition free education to over 225 severely physically disabled children from pre-school through high school. Students, according to their ability, follow either an academic program leading to college and eventual careers in professional or management positions, or vocational programs leading to clerical, supervisory, or industrial careers. The Center operates Abilities, Inc., a demonstration work center, research and training institute, homebound employment program, work orientation program, work-study program, and a business education pavilion. The Center, "firmly believes that in the competive employment situation, the Handicapped worker is the equal of his able bodied counterpart."

Projects with Industry (PWI)

PWI is a cooperative program between government and industry in which disabled persons are trained and placed in competitive jobs. The project operates in 11 states (not in Colorado, however) and 500 businesses have been involved. There have been over 5,000 disabled persons served by this program. About 70% of them have been placed in a variety of industrial jobs.

Region VIII HEW/Colorado State Division of Rehabilitation Unpaid Work Experience Program

The Unpaid Work Experience Program is designed to prepare rehabilitation clients for gainful paid employment. It combines the advantages of rehabilitation and experience gained from actual work assignments and by-passes the Civil Service requirements. This program developed through the cooperation of the Regional Director of HEW and the Director of the Colorado State Division of Rehabilitation selects disabled candidates to work for a period of 700 or more hours. Approximately one month before the end of the initial 700 hour appointment both the state and HEW will make concerted efforts to place candidates in permanent positions both in the private and public sectors.

Multi-Dimensional Objective Vocational Evaluation (MOVE)

The MOVE system is used by Goodwill Industries of Denver to evaluate job potential of disabled people referred to the agency. It is a three week evaluation program, that includes assessment of personalities and interests, counseling, planning and training in job readiness. Unlike other job ability tests, MOVE is completely objective. It measures individual ability factors at any level, there is no pass or fail, and the scores do not depend on subjective criteria. The data is fed into a computer, along with any necessary information on physical limitations or working conditions. The print-out shows the kind of work most feasible for that individual along with detailed lists of jobs he or she would be able to perform.

Sheltered Workshops

According to the Department of Labor, there are 2,766 sheltered workshops in the United States, serving an estimated 410,800 clients as of January 1974. In Colorado there are 30 sheltered workshops, work activity centers, and evaluation and training centers, 11 of which are in the Metropolitan Denver area. Although national figures indicate only a small percentage (5%) of orthopedically disabled people are served by sheltered workshops, we were not able to obtain figures on orthopedically disabled persons in workshops from the Colorado Division of Developmental Disabilities, despite repeated attempts to do so. Among the residents of the Atlantis Community, about 40% have worked in a sheltered workshop, even though such facilities have been traditionally geared for "mentally retarded persons." Because clients are paid a standard wage established by an able-bodied person performing a specific task, many severely disabled persons make 10¢ per hour or less. Contrary to statements made by workshop staff members, clients do not make minimum wage salaries. Even though a severely disabled person may be in a sheltered workshop making as little as 10¢ per hour, he or she may be classified as successfully rehabilitated according to standards set by the Colorado Division of Rehabilitation.

Although there are a number of problems associated with sheltered workshops, in theory, they serve a purpose for some individuals. In the best sense they are a training ground whereby disabled persons can eventually make the transition to competitive employment. Workshops may relieve burdens from parents and allow the client a greater degree of socialization. For severely physically disabed persons, however, sheltered workshops which emphasize physical activities are absurd.

VOCATIONAL REHABILITATION (VR)

Perhaps no other program is as intrinsically associated with the disabled as Vocational Rehabilitation (VR). VR has traditionally had employment as its prominent goal. "This is evidenced by the stipulation that: state agencies receive funds to assist handicapped individuals to become employable; client eligibility is dependent upon employment barriers and expectations of potential for employment; and annual reported statistics stress the number of rehabilitants or clients who have been placed into employment (Statue 26)", Annual Report of the U.S. Department of Health Education and Welfare to the President and the Congress on Federal Activities Related to the Administration of the Rehabilitation Act of 1973, U.S Department of HEW, Washington D.C., 1974.

The early discussions of vocational rehabilitation emphasize the intent of the program with respect to workers injured in industry. The original Act, PL 236, (June 2, 1920) stated the Vocational Rehabilitation was to serve "persons disabled in industry or in any legitimate occupation." Almost from the beginning, the Vocational Rehabilitation program has paid for itself. The individual gains made by the disabled have been accompanied by financial gains as well. The successful rehabilitant is no longer dependent on public assistance but is a contributer to society. From the beginning of the initial Act until the Rehabilitation Act of 1973 Vocational Rehabilitation has expanded both its clientele and services. The terminology of restoring a disabled person to the world of work became known as "Comprehensive Rehabilitation." The comprehensive approach reflects the growing awareness of the inter-dependence of a person's medical, educational, vocational, social and psychological components."

Since the justification of the program has always hinged on the higher benefits to society, compared to programatic costs, pressure coming from Washington and the various state capitals has been applied to rehabilitation administrators and counselors to rehabilitate more disabled persons. What has ensued has been a numbers game. In the 1968 publication "Report of the National Citizen's Advisory Committee on Vocational Rehabilitation, this situation was discussed. "We were distressed to learn that the vocational rehabilitation counselor often finds himself in a condition of crisis today. Overwhelmed by large caseloads, pressures for closures, excessive administrative chores and limited case services funds, the dedicated counselor is often forced to compromise his conscience. His original concept of working closely with handicapped clients is frustrated by the harsh realities of the job. Perhaps the most damaging force to the counselor's self-concept, and increasingly to the image of the entire vocational rehabilitation program, is the so-called numbers game. The pressure, whether expressed or implied, to demonstrate substantial increases in the number of people rehabilitated is very real. The effect is to force the counselor to seek out the 'easy case', the person who can be made employable with a minimal expenditure of agency time and money. As a result, the difficult case - the severely disabled or multiple handicap person, who most desperately needs help - is shunted aside as 'not feasible'. Quality of service is thus sacrificed for expediency. In some 'the numbers game' results in a perversion of both program objectives and job counselor satisfaction.

It is obviously much easier and considerably less costly to serve and place mildly handicapped persons rather than those with a severe disability. Although more severely disabled persons are being served by the various state Divisions of Vocational Rehabilitation, including Colorado, severity of disability has been the most common reason used by Vocational Rehabilitation counselors for immediate client close out in the past.

Because severely disabled persons have not traditionally had the vocational rehabilitation "potential deemed necessary for employment", they received no services from Vocational Rehabilitation. Independent living, no matter how beneficial for severely disabled persons was considered cost inefficient until the 1973 Rehabilitation Act. "Essentially the issue raises a question as to whether the program should restrict its orientation and intent to the vocational realm, with employment as a sole program objective, or be extended into comprehensive services leading to increased independence and an enriched quality of life for handicapped " (Report On The State of the Art Conference, Center for Independent Living, October 21-23, 1975, "The Role of the State Vocational Rehabilitation Agency, Donald E. Galvin). For the last 25 years, a number of people have been pushing for independent living rehabilitation services for the severely disabled person. In 1954 Mary Switer, the Commissioner of the Rehabilitation Services Administration, unsuccessfully campaigned for "activities for daily living" services. Although in 1973, the original Congressional approved version of the Rehabilitation Act authorized the provision of comprehensive services leading to independent living, President Nixon vetoed it on the grounds that it was "a distortion of the basic intent of the program."

As the director of Vocational Rehabilitation Services in Michigan states, "the present law stresses that an eligibility be established beyond a reasonable doubt and encourages risk taking, but it stops short of defining rehabilitation services as a right. Adding new legimitate, specific, and verifiable client objectives, independent living, to the present employment objective, would seem to be a logical extension and necessity for the most severely handicapped."

Although much literature on the 1973 Act stresses independent living as one end result and vocational rehabilitation as another end result, the Atlantis Community believes that in cases of severely disabled individuals, independent living can be viewed as a prerequisite to successful vocational independence, not as a seperate end. To test this hypothesis, the Atlantis Community has submitted a proposal to the Rehabilitation Services Administration - Research and Demonstration Division.

While the federal mandate to serve severely disabled has been adhered to, there has been a noticeable drop in the number of persons rehabilitated. Some, who believe the Vocational Rehabilitation program should relate only to job placement, are critical of the trend to independent living as a goal. In essence, a new numbers game has evolved. Instead of rehabilitation being the end result, the Colorado Division of Vocational Rehabilitation now points to the absolute number of people served. The numbers game can be won or lost depending on how well the players such as the Joint Budget Committee of the legislature and the Division of Rehabilitation administrators play it. A successful rehabilitant can be a person in a sheltered workshop making $10.00/month or even someone making no money at all. Several members of the Atlantis planning staff were closed out "successfully" by their rehabilitation counselors even though they were making $65.00/month. On the other hand, some severely disabled persons will, because of the expanded services provided to them, thrive socially, psychologically and economically.

Another criticism of the Division of Rehabilitation is its lack of outreach. Although the Rehabilitation Act of 1973 prioritizes severely disabled persons who live in nursing homes and institutions, there is almost a total lack of involvement on the part of the Division to reach people in such facilities.

Beside not providing services to severely disabled persons for independent living, the greatest amount of criticism generated towards Vocational Rehabilitation is its inability to place disabled persons in jobs. "Placement of severely disabled calls for a creative effort on the part of those who are involved in the process of employment. Just as the problem of severe disability is multifaceted, the approach used in treating, circumventing, or eliminating those barriers to placement of these individuals must also be multi-faceted. It must use all the resources, people and ideas available if it is to be successful." (Comprehensive Vocational Rehabilitation for Severely Disabled Persons, December 1975, Washington D.C.) "Placement of the Severely Disabled: A Time for Creative Effort, Roger S. Decker.

Dunn states that job placement is a problem that periodically is discussed by rehabilitation professionals. "It is apparent that if job placement is to be a continuing activity of vocational rehabilitation counselors, some fundamental changes in the total ecology of the vocational rehabilitation programs are called for. Changes will permit job placement to endure as a major responsibility of the vocational rehabilitation counselor and not secondarily which relates to the whim and fancy of the moment." (Placement Services of the Vocational Rehabilitation Program, University of Wisconsin/SRS, December 1974, Dennis Dunn). As one rehabilitation counselor states, "Toward the end of the fiscal year there is a tremendous push to close out clients for successful rehabilitation. This means adding more people into sheltered workshops and positions that are not adequate to the needs and desires of the clients."

Decker advocates that a creative approach be encouraged by rehabilitation counselors to assist with the process of placement. "One such creative approach may be the early involvement of a community team which assists the individual and the rehabilitation professionals in their efforts. This team would be made up of those persons who are experts in the client's ocational field of interest. The vocational coordinator of the Job Development Laboratory, believes that a wholistic approach to job placement be undertaken. Placement problems do not appear to stem as much from lack of available services as from lack of service integration which enabled the client capabilities to match a job requirement. In order to achieve an integrated, wholistic approach, the Job Development Laboratory utilizes a research team composed of a rehabilitation coordinator, biomedical engineer, industrial designer and occupational therapist. An orthotic-prosthetic technician, psychiatrist and psychologist are available for consultation. The vocational process for each client involved client evaluation, job analysis, job-client matching, prescription for low cost effective adaptations or assistive devices when necessary, training, placement, follow-up contacts and cost benefits analysis."

Problems with Vocational Rehabilitation

What is or is not the responsibility of the Division of Vocational Rehabilitation? Should the Division provide transportation to their clients or is this the responsibility of Regional Transportation District? Can Rehabilitation place people in jobs when barriers impede placement? Is Rehabilitation responsible for meeting the attendant care needs of severely disabled clients, or should these needs be met through other social service programs? These questions are not easily answered.

The numbers game and the pressure placed upon the Division of Rehabilitation by the Joint Budget Committee and Congress has prematurely "placed people in jobs they either can't or don't wish to perform." The quality of placement is sacrificed to the quantity in conformance to the numbers game. Information about various benefits that would assist severely disabled clients is not readily disseminated by rehabilitation counselors. The almost total lack of knowledge of the "self support plan" reflects in part this lack of information. Even though the Rehabilitation Act of 1973 does state that priority be given to the severely disabled there are still significant numbers of severely disabled not being served by the division.

The Division has projected hiring more minority persons for positions, but has not projected any increase in the number of disabled working with the Division. The State Rehabilitation Plan, to the best of our knowledge, is made without any direct input from the disabled, although the Rehabilitation Act of 1973 encourages such input. The new direction of the Division has increased dialogue with other agencies, but this has been a major problem in the past. In an attempt to "streamline the program" many new rules and regulations have been promulgated. With each new rule and regulation the reverse effect has happened. In order to justify providing a service to a client, much more paper work has been created. This, according to some rehabilitation counselors, creates, rather than limits, the already heavy amount of paper work required. In summing up the Urban Institute's Study, the authors concluded, "When we began this study, Vocational Rehabilitation loomed large. At the end we found that it accounted for only 2% of federal expenditures on the severely disabled.

While the influence of Vocational Rehabilitation far outstrips that modest percentage we wondered at the expectations people place on the program without the corresponding willingness to provide the resources." In providing transportation, specialized medical equipment, psychological counseling, tutorial assistance, attendant care, and therapy, the Division of Rehabilitation is essentially performing a function that should have been made available through other community agencies. The $210,000 per year that Vocational Rehabilitation spends in Denver on transportation for disabled clients should have been provided by Regional Transportation District.

COMPREHENSIVE EMPLOYMENT AND TRAINING ACT OF 1973 (CETA)

CETA was designed to provide employment and training related services to economically disadvantaged citizens. CETA is administered by the U.S. Department of Labor and allocates federal funds to local municipalities. In Denver, CETA sponsors the Denver Manpower Administration's Opportunities Industrial Center, OIC, and the Freedom House, Services Employment Redevelopment Center. There are other programs CETA sponsors in neighboring counties. The Denver Manpower Administration served approximately 3,000 unemployed or underemployed individuals in fiscal year 1976. None met the Atlantis definition of severe disability. CETA "is bening encouraged to invest more of its programs resources to those most in need, a category which includes the handicapped. Yet persons less severely handicapped by VR standards may well be too severely handicapped for CETA enrollment by CETA standards. In an effort to promote and encourage coordination arrangements between vocational rehabilitation and other program sponsors, the 1973 Rehabilitation Act specifically requires the annual plan to provide for coordination among agencies. Section 106(B)(2)(3)(7) of the CETA Act requires that each prime sponsor,'to the extent feasible, establish cooperative relationships and linkages with other manpower related agencies in the area."

(CETA and HEW Program 1976). In the CETA and HEW Report put out by the Department of Labor a great many recommendations that are both creative and feasible were discussed. The potential linkages between the different manpower agencies are tremendous and would be of great benefits in the underemployed and unemployed disabled community.

AFFIRMATIVE ACTION

Section 503 of the Rehabilitation Act of 1973 established an Affirmative Action plan for handicapped people. Every employer conducting business with the Federal Government under a contract for more than $2500 must take affirmative action to hire disabled persons. A contractor must make "reasonable accomodations" to the physical and mental limitations of handicapped employees or job applicants, unless the contractor can show that the accomodations would create an undue hardship on the business. From the time of the 1973 Rehabilitation Act until April 1976 when the Department of Labor issued rules and regulations effecting affirmative action, no significant enforcement of affirmative action was undertaken. Virtually a three year gap existed before rules were published. Affirmative Action applies to job assignments, promotions, training, transfers, accessibility, work conditions, termination and the like. The President's Committee on Employment to the Handicapped states that half of all businesses of America - some 3,000,000 - are covered by this Act. Among them are virtually all of the industrial leaders of the United States.

For those contractors and sub-contractors not in compliance with Affirmative Action regulations, the Director of the Office of Federal Contracts Compliance will try to initiate through informal means a solution to the complaint. Should the informal means fail, judicial enforcement would then be initiated.

Should this also be inappropriate, withholding progress payments to the contractor and termination of contract would occur.

Although complaints by disabled individuals who have been turned down for employment by affirmative action employers trickle into the Federal Contract Compliance Office, most disabled persons are not familiar with the Affirmative Action program. Very little information on Affirmative Action for disabled exists in Metropolitan Denver. Critics of Affirmative Action say many violations are not corrected and potential penalties for obvious cases of non-compliance are not severe enough. Among the disabled there appears to be a split between those who believe in using a heavy hand in making Affirmative Action work and those who prefer educating employers to the benefits of hiring the diabled with a soft hand approach.

The Denver Mayor's Committee on Employment of the Handicapped likewise believes that Affirmative Action is working and the contractors and subcontractors are receptive to hiring disabled persons. In any event it is difficult to ascertain whether a disabled person has been discriminated against in regard to employment, due to a disability or due to the inability to fulfill a job description. In a paper preapred by the President's Committee on Employment of the Handicapped (PCEH), the chief of vocational services for Rancho Los Amigos Hospital in Los Angeles states that: "More employers are willing to hire handicapped people - even severely disabled people - if they are highly skilled. Training however is out of touch. We've got to provide more sophisticated skills to take advantage of this willingness to hire. The resource of job-ready handicapped people will dry up in the next two years, and so even if the economy improves, and Section 503 is really enforced, there may be no trained disabled to employ."

The excessive rates of unemployment among severely disabled persons, as reflected in our own Atlantis Survey, indicate that Affirmative Action is not working. While few overt actions of non-compliance exists, the almost total lack of outreach efforts on the part of contractors and subcontractors creates, once again, a passive form of discrimination.

Some combination of the hardline and soft sell approaches needs to be explored. The Urban Institute Study states that several European countries, most notably Great Britain and West Germany, have required firms above a certain size to hire handicapped workers as a given percentage of their employees. Ms. Beatrice Reubens, in The Hard-to-Employ: European Program, states: "All disabled laborers must be paid the same wages as their co-workers except for those activities exempted by the law. Despite some difficulties in getting potential handicapped registered within the geographic distribution of jobs, the British system appears to have significantly reduced the employment problem for the handicapped. Although more restrictive in terms of eligibility, the West German quota system appears to have been equally effective."

COLORADO DIVISION OF EMPLOYMENT AND TRAINING

The Colorado Division of Employment and Training (CDET) is charged with providing employment services to handicapped workers. "In 1954 the program for the handicapped, originally developed in response to the needs of disabled World War II veterans, was formalized by amendment to the Wagner-Peyser Act. These amendments stipulated that counseling and job placement services were to be provided for the handicapped and called for the designation of at least one person in each public employment office to insure that these services were available. Under Department of Labor Regulations pertaining to the Rehabilitation Act of 1973, employment service agencies are listed as an important source of assistance in recruiting and referring qualified handicapped persons and in providing technical assistance to employers."

"Handicapped workers represented 3.7% of the total applicants in FY 76, and their placement rate slightly exceeds the rate for all applicants." No breakdown between types of disability are recorded in the statistics. A handicapped employment specialist for the CDET believes that for severely disabled persons the employment rate was probably lower. To her knowledge she has never known of a person in a wheelchair to be placed in five years. At the 600 Grant Street location of CDET there are no more than one or two persons per month that meet Atlantis definition of severely disabled. Although counseling and job placement services are supposed to be the responsibility of at least one person in different employment offices, this does not seem to be the case. The specialist says that adequate time is not spent with severely disabled persons to give adequate services. She said that severely disabled persons are referred to whichever counselor happens to be available at that time and many of the counselors do not have knowledge of programs affecting the disabled. In past years, there was a more or less informal arrangement between the Division of Vocational Rehabilitation and the Division of Employment and Training. Vocational Rehabilitation was basically responsible for providing training, counseling, and supportive services to disabled clients, while the Division of Employment was "responsible for placing these individuals." At the present time no such arrangement, formal or informal, is in force. The Division of Employment in the process of working out a relationship with the Division of Rehabilitation.

PRIVATE EMPLOYMENT SERVICES

Woodard Associates (WA) is a private employment service for disabled persons founded by Ms. Helen Woodard of Denver in 1975. Ms. Woodard formerly worked for the Colorado Division of Vocational Rehabilitation and left to start her own service because she felt she could do a better job placing disabled job seekers through private means rather than through the Division. Although refined statistics are not available, Ms. Woodard said that about 80% of the people involved in her program were placed. The clientele served by WA are usually people who are on workman's compensation program and most are not as severely disabled as those involved in the Atlantis Community. They are also highly motivated and have a great desire to return to work. The means by which these individuals are placed into competitive employment are quite relevant to the vocational rehabilitation process. Woodard employs people who specialize in counseling, planning, evaluation, job placement and job development. There is a feeling that due to the private status of the agency there is more incentive for the public sector to return phone calls and to conduct work in a business-like fashion. While at Vocational Rehabilitation there is not the incentive to really work at placing clients. In addition to this, because of their business status, many employers are more apt to deal with them and get away from the "welfare programs." Miss Woodard states that the federal government has been excellent in assisting to place disabled persons. The city has been receptive and the state totally unreceptive. She feels too, that Affirmative Action employers are by and large sincere in their efforts to employ disabled persons. No hard "hit 'em over the head" tactics are needed with these agencies. It is rather difficult to compare Woodard Associates to the Division of Rehabilitation. The caseload for WA is considerably smaller and there is a highly qualified staff with a great deal of specialization. Funding is not a major problem and the cases which they work with are not as severe as those handled through the Division of Rehabilitation. Nevertheless the Division of Rehabilitation can learn from the structure of Woodard Associates, and should consider purchasing their services for the placement of the severely disabled.

CONCLUSION

Despite the tremendous desire on the part of a severely disabled person to be competitively employed, there does not exist a mechanism through vocational rehabilitation and other agencies to fulfill this desire. As noted, there are numerous barriers discouraging gainful employment for severely disabled persons. Perhaps the greatest barrier of all is in the minds of man. Although there have been incredible technological advances in rehabilitation engineering and medicine, there has not been a considerable impact on employment opportunities for severely disabled persons. Affirmative Action has had potential but the training opportunities that will enhance employment are drying up. Until positive action is taken the disabled will continue to be underemployed or unemployed.

RECOMMENDATIONS FOR EMPLOYMENT

Atlantis recommends:

1. That the Executive and Legislative branches of government set forth a national policy of full employment for all individuals desiring to work.
2. That governmental regulatory agencies monitor Affirmative Action employers to see that plans are made to incorporate disabled and that disabled are in fact being hired and promoted.
3. That the Executive and Congressional branches of government create

incentives, not disincentives, that will enable disabled persons to work without eliminating needed benefits.

4. That the Rehabilitation Services Administration and the various State Departments of Rehabilitation develop linkages with other federal and state agencies to coordinate services provided to the severely disabled.

5. That the Congress of the United States allocate funds to the state Divisions of Vocational Rehabilitation and RSA for the creation of a Division of Independent Living.

6. That Congress create Special Projects for disabled persons, and able-bodied persons to work with the disabled.

7. That disabled individuals have direct input into the state rehabilitation plans.

8. That the Colorado Division of Rehabilitation develop a computer training program for the disabled.

9. That the Division of Colorado Rehabilitation develop a Project With Industries (PWI) plan.

10. That the Colorado Division of Rehabilitation develop an outreach program to serve severely disabled persons in institutions and nursing homes and other facilities where they are not currently receiving services.

11. That employment counselors of Colorado Division of Rehabilitation and Employment and Training help develop jobs for disabled persons.

12. That the Colorado Division of Rehabilitation and the Colorado Division of Employment and Training work together to develop a comprehensive state manpower plan to serve disabled persons.

13. That the Colorado Division of Rehabilitation work with the Social Security Administration to initiate more self-support plans and more in-

centives to work for disabled persons.

14. That rehabilitation efforts by the Colorado Division of Rehabilitation be extended to include disabled persons no longer dependent on public assistance for support.

15. That the Colorado Division of Rehabilitation establish a center demonstrating special bio-medical adaptive devices that will enhance independent living and vocational rehabilitation for severely disabled persons.

16. That the Colorado Division of Rehabilitation hire more severely disabled persons on their staff.

17. That the Rehabilitation Services Administration fund a research project to investigate whether independent living is a prerequisite for successful vocational rehabilitation for severely disabled persons.

18. That the State of Colorado and the City and County of Denver include disabled persons in all actions concerning affirmative action plans.

19. That the Division of Rehabilitation work with the State Universities to place vocational rehabilitation students into community programs working with the disabled.

20. That the Colorado State Department of Personnel develop and implement an Affirmative Action Program for disabled persons.

BULOVA
SCHOOL

Recreation

Chapter Nine Recreation

"I'm no longer included in my old circle of friends, it bothers them."

Recreation for severely disabled persons is not a priority among the numerous federal, state and local agencies working with the disabled. The Urban Institute states, "The problems of handicapped individuals are multiple and their needs are extensive. In evaluating what has to be done, priorities for the provision of vital services such as medical, physical restoration, special education, and rehabilitation are quickly established. The special social needs of the handicapped can easily be viewed as secondary." Although rehabilitation professionals have long held that social interaction through recreational activities is important in the rehabilitative process, recreation activities are rarely provided thrugh vocational rehabilitation funds. "The establishment of recreational programs as a related human service and its importance in relation to other supportive services has not been accepted by federal agencies or by vocational rehabilitation itself. But the provision of recreational services to compensate for lack of personal and social adjustment has long been integral to the planning of voluntary social agencies. These groups have recognized the vital function recreation plays in personal adjustment, recovery, and rehabilitation of the disabled individuals." (Urban Institute)

The Atlantis Community has provided extensive recreational opportunities for its clients. The disabled regularly take in movies, concerts, restaurants and other social activities. These and other similar activities have had an extremely positive effect on the disabled that is reflected in increased self-confidence, awareness, and growth. The Atlantis Needs Survey shows that only one respondent in three felt that she/he had enough opportunity to engage in recreational activities. Respondents felt that special assistance, in the form of attendant care, special adaptive equipment, and transportation, would increase their opportunity to participate in recreational activities. Although it appears that different disabling conditions would require specialization of recreational services, most disabled persons are lumped together by recreational workers as being "handicapped" and are served as a whole. The majority of the national and local recreation programs for the handicapped are geared primarily toward the mentally retarded. By reviewing a list of over 60 "specialized therapeutic recreation programs" for the disabled prepared by Dr. John Nesbitt of the University of Iowa, the Atlantis planning staff tried to gain some ideas of what was being done throughout the nation for the severely disabled. Although letters were sent to most of the listed agencies there were very few responses. The responses dealt mainly with the mentally retarded and to a much lesser degree with the severely disabled. In addition to a low level of funding of recreation for the disabled, other problems include transportation, inaccessibility, and the limited amount of money the disabled person has to purchase recreation. In the financial situation, for example, a severely disabled person is usually on a fixed income in the form of SSI or some similar income maintenance program. (See Chapter Two) To this person recreation is oftentimes the lowest priority on his/her list. The budget prepared in Chapter Three on attendant care reflects this.

Transportation is probably the greatest barrier facing an individual who wants to go to a recreation center or recreational activity. RTD Handi-ride buses do not provide services for recreation other than a Saturday shopping special during part of the day. Private special wheelchair accessible vans cost anywhere from $12.00-$20.00/round trip.

Although the new Denver recreational centers are accessible to the physically disabled, many of the old ones are not. In addition, pool facilities are inaccessible and there is a total lack of special adaptive equipment to enhance recreation for the disabled. According to Dr. John Nesbitt, "no more than 1/5 of the nation's ill and handicapped are receiving any type of recreation and leisure services." (Nesbitt, J., Recreation for Exceptional Children and Youth)

As in other areas researched, attitudinal barriers are also a problem in recreation; "Attitudinal barriers have been created and maintained by both the handicapped and non-handicapped population. Since ancient times those individuals who are 'different' have been segregated from the rest of the population. In the United States large institutions were built to house and maintain those persons who because of physical disabilities were not considered capable of independent functioning within the community." (Urban Institute)

GOVERNMENTAL INVOLVEMENT

Public Law 88-29 Outdoor Recreation Program Act mandates that recreational resources be available to all Americans. "The special recreational needs of the mentally and physically handicapped are often overlooked in the planning and provision of recreational opportunities. Physically handicapped people are frequently prevented from utilizing outdoor recreational opportunities by construction features of buildings and facilities." (PL 88-29) Traditionally the 1973 Vocational Rehabilitation Act states that "no handicapped individuals in the United States shall, solely by reason of his/her handicap be excluded from participation in, be denied the benefits of, or be subjected to any program or activity receiving federal financial assistance." (PL 93-112) The proposed rules and regulations set forth in the Federal Register create a strong mandate for integrating handicapped children into regular or special recreational programs. The essence is to provide, to the greatest extent possible, recreation for the handicapped. The Architectural Barriers Act of 1968 referred to throughout this report, states that all buildings and facilities constructed with federal funds, either whole or in part, must be made accessible and useable by the disabled.

Although some cities, most notably San Fransciso and Washington, D.C., have taken a very active role in providing recreation for the disabled, Denver has not. The responsibility for providing recreation to the disabled has been delegated to the Denver Board for the Mentally Retarded and Seriously Handicapped. Although the Denver Board, which receives approximately $30,000 from the City, does run an excellent program, it serves primarily mentally retarded individuals. Of the 500 plus indiviuals being served by the Denver Board's recreation program a dozen or less according to the project's director, would meet the Atlantis definition of severely disabled. There appears to be a tremendous lack of interest on the part of the Denver Department of Parks and Recreation in providing for the disabled. As one person involved in recreation for the disabled noted, this is because the disabled are perceived as a burden. Since disabled individuals cannot readily be mainstreamed into existing programs without some adaptations, there is a tendency to totally discount their needs. The Atlantis planning staff sent questionnaires to each director of the recreation centers in the City of Denver and from the few responses that were returned there appeared to be a total lack of participation among the disabled in the recreation programs. In a random visitation of a half a dozen recreation centers, the Atlantis planning staff was told that essentially disabled are welcome to their facilities but there are no special adaptations or programs to accomodate them. Most center directors and recreation administrators invariably pointed us to the Denver Board for the Mentally Retarded.

The City of Lakewood runs a recreation program on Saturdays for disabled individuals and although they do serve many severely disabled persons (by Atlantis definition), the program is not specialized to meet their individual needs. In any event, there are services being provided. In an HEW Research and Demonstration Project in which recreation resources were surveyed throughout major cities in the United States, including Denver, it was determined that "County Municipal Recreational Departments provide a wide variety of information about services and organizations for public recreation. However it was disturbing to find that although 64% of the services reported participation of disabled persons, only 1% of the 5,000 facilities surveyed had incorporated adaptations for the handicapped." Two administrators of the City of Denver, Department of Parks and Recreation would favor providing recreation services for the disabled if the Denver City Council would authorize the funds.

Dr. John Nesbitt, speaking in Denver in September, 1976, on "The Recreation Needs of Disabled People," talked a great deal about the Recreation Center for the Handicapped in San Francisco. He believed the Center was a model of recreation for handicapped individuals throughout the country. Three members of the Atlantis Planning staff saw the Recreation Center for the Handicapped in San Fransciso while visiting the Center for Independent Living in Berkeley. The Recreation Center for the Handicapped was started in 1962 to fullfill a serious need for year round, social, cultural, and recreational opportunities for the disabled. The Center is a truly magnificient structure located near Lake Merced in San Fransciso, and employs

85 persons including a program staff, business department staff, transportation, maintenance, and kitchen staff. It is funded 68% by funds from federal, state, and local sources, and 32% from voluntarily contributions. The operational budget for 1976 was $800,000. Over 1100 "handicapped people" participate in the Center's programs per week. Although on the surface the recreation Center appears to be a model for the disabled, the three members of the Atlantis Planning staff were quite unimpressed. The Center is not centrally located therefore necessitating special transportation to and from Lake Merced. Although the Center has a fleet of 15 vans for transportational purposes, none contain lifts or ramps. Wheelchair users in manual chairs were either carried on or muscled in their chairs into the vehicles. The Center is aesthethically pleasing and contains a great amount of space. We were quite surprised, however, that much of the space was used for staff purposes, not for recreation. Separate bathrooms for staff and clients and the general separation of the two groups gave the impression of an us/they type of relationship. Most surprising to us was the fact that no special adaptive recreation equipment was available for use by a severely physically disabled person. In addition we found the Center to be very top-heavy in administrative costs.

BERKELEY OUTREACH RECREATION PROGRAM

The Berkeley Outreach Recreation Program (BORP), located across the Bay from the Recreation Center for the Handicapped in San Fransciso, operates a recreation program for severely disabled persons through two grants from the City of Berkeley and the Community Action Program. "The philosophy behind BORP is to overcome the barriers which prevent the disabled from becoming involved in recreation. Some of these areas included transportation, the high cost of attendant care services, extra assistance needed in some activities, as well as some psychological barriers. A major objective is to expose persons to innovative activities that may not have been considered feasible for the disabled, as well as those activities which can be pursued independently. BORP does not believe its program is designed to be therapeutic anymore than recreation in general is a means of personal development. Underlying BORP is a belief that the disabled themselves are experts in their own needs and should be in control of their services." (BORP Fact Sheet)

BORP offers recreational and instructional swimming twice a week, sponsors classes in body conditioning, gymnastics, modern dance, gourmet cooking, archery, self-defence, horseback riding, yoga/massage, and snorkling. They have also included adaptive skiing, camping, and numerous outings throughout California. BORP also refers disabled people to other recreational activities. Although they do not have their own Center, two schools are used in the East Bay area. Disabled athletes lead the sports program and have helped to set up the California wheelchair games. BORP has been very active in exploring special adaptative devices that will open up new areas of recreation for the severely disabled. They have developed special saddles for horseback riding and adaptative archery equipment.

BORP uses the expertise gained by the National Inconvenienced Sportsman Association for skiing classes for amputees and people with crutches. "BORP is particulary important because of its ability to integrate the disabled into recreational activities which previously have belonged entirely to the able-bodied. It gives the local disabled a chance to prove to themselves and the general public that they can ski, camp, and ride. Disabled people in other communities can learn from BORP's experience." (Independent, Vol. 3 No. 2, Spring 1976)

Unlike the recreation centers in Washington, D.C. and San Franscisco, the BORP program concentrates almost entirely on the severely physically disabled, not all disabled groups.

JOSEPH H. COLE CENTER (WASHINGTON, D.C.)

The Joseph H. Cole Center, named after the Director of the Washington, D.C. Department of Recreation, is the country's first municipal recreational center specifically planned, designed and publicly financed for use by the mentally and physically handicapped. The Center will cost $2,000,000 and will include a swimming pool, an auditorium/gymnasium, an art room, arts and crafts shops, a day care center, and an outdoor play and exploration area that will include a minature golf course, all carefully designed for use by both children and adults and for wheelchair, blind and other disabled persons.

WHEELCHAIR GAMES

The wheelchair games are annual events in which physically disabled persons utilizing wheelchairs for mobility compete against one another. Contestants are rated and placed into one of five categories depending on their muscular conditions. Wheelchair games are geared primarily to the spinal cord injured person although individuals with other disabilities do compete in these events. The Regional Wheelchair events are sponsored by the Craig Rehabilitation Hospital. Winners of the Regional events travel to the National Games which are held in different cities throughout the country.

There are a few wheelchair basketball teams in the Denver area. These teams compete against one another, other city teams, and able-bodied teams such as area professional teams like the Denver Broncos for fund raising purposes.

ENGLEWOOD SWIMMING PROGRAM

The Englewood Swimming Program organized through the efforts of Ms. Mary Carpenter, physical therapist, involves several dozen severely disabled persons one night per week at the Englewood High School swimming pool. Ms. Carpenter recruits volunteers to serve as attendants for the disabled participants and help provide the necessary participation. The program is quite popular among the disabled and has been one of the most consistent outlets for fulfilling the recreational needs of the severely disabled. Ms. Carpenter has just initiated a program at the Foothills Recreation Center in Lakewood for physically disabled persons within Jefferson County.

EASTER SEAL HANDI-CAMP

Easter Seal Handi-Camp operates a two week summer program for disabled persons. The two camps are located in Georgetown and near Grand Junction and are sponsored by the Colorado Easter Seal Society. Expenses for the camping experience are usually paid through private donations or by a fee based on a sliding scale. Volunteers serve as attendants for the program which has served many disabled persons over the years.

SPECIAL ISSUES

The concept of mainstreaming disabled persons into regular recreation programs has begun to surface. Although few advocates of this concept would go so far as to say that all recreational activities could include the severely disabled, some declare that with the use of adaptive equipment in some activities and a great deal of creativity, the disabled need not be only spectators of recreation.

The Recreation Center for the Handicapped in San Fransciso and the Cole Center in Washington, D.C. offer essentially, special self-contained programs for the disabled. While they do "serve" disabled persons, they have not demonstrated any specialization for different categories of the clients they try to serve. Although they have negative qualities, such Centers have potential for specialization and supportive services that could provide active recreation for the severely disabled. The BORP staff felt strongly about "segregated facilities" and believed recreation should be provided in as integrated a setting as possible. Although active recreation could be provided in a regular recreation center or high school gymnasium, the Atlantis staff is not suggesting that all activities be integrated. A quadriplegic is physically unable to compete in a competive basketball game with able-bodied players. Although one paraplegic on the Atlantis staff stated he had the right to be the worst baseball player on a team, many disabled persons do not wish to be in such a position. Perhaps with a great deal of creativity as demonstrated at BORP, rules could be modified to account for the abilities of severely disabled persons, not their disabilities. For example on a river raft trip sponsored by BORP, quadriplegics and blind individuals provided mutual assistance in reading the rapids and rowing the boat. Other adaptive equipment has been created such as archery bows and horseback saddles enabling severely disabled persons to take part in active recreational activities.

ACTIVE VS PASSIVE RECREATION

As reflected in the Atlantis Needs Survey, most of the recreational outlets for severely disabled are passive in nature. TV watching, reading, and other forms of passive recreation have higher frequencies of involvement on the part of severely disabled persons. Because of the architectural, transportational, and attitudinal barriers on the part of recreation professionals, such passive activity dominates recreation for the disabled. The Needs Survey suggests that severely disabled persons would participate in active forms of recreation if the activities were accessible and available.

CONCLUSIONS

Although rehabilitation professionals are sensitive to the recreation needs of disabled persons, the various State Departments of Vocational Rehabilitation are not equipped to finance such activity. As one handicapped recreation specialist stated, the Director of the Denver Department of Parks and Recreation "could care less about the handicapped." The low level of funding for disabled/handicapped persons, the attitudes of the Denver Parks and Recreation staff, compounded with the transportation and architectural barriers, make active, non-home-bound recreation inaccessible to severely disabled persons. Despite some good programs run by Craig Rehabilitation Hospital, the Easter Seal Society, Englewood High, the Foothills Recreation Center and others, recreation for severely disabled persons is very inadequate.

The 'super' recreation centers for the handicapped serve all categories of disability and haven't, in the opinion of Atlantis, served severely "and non-mentally retarded disabled individuals." The Berkeley Outreach Recreation Program (BORP) has had great success in utilizing special adaptive equipment and in establishing a creative open approach toward making active recreation accessible to the disabled. Atlantis believes that the BORP Program is truly a National model of recreation for the severely disabled.

RECOMMENDATIONS

For recreation, Atlantis recommends:

1. That the City of Denver take a more active role financially and attitudinally in developing a recreation program for severely physically disabled.
2. That the City of Denver work with the Colorado Division of Rehabilitation and the Recreation Departments of the University of Northern Colorado, Metropolitan State College, and the University of Colorado to develop innovative recreation programs for severely disabled individuals and to place recreation students within indigenous community groups.
3. That the Colorado Division of Rehabilitation and the City of Denver Parks and Recreation Department provide or purchase adaptive devices that will enhance independent recreational activities for disabled persons.
4. That the Denver Department of Parks and Recreation work with the Regional Transportation District to provide transportation to social and recreational programs.
5. That the Denver Mayor's Commission on the Disabled conduct a survey and publish a recreational guide for the City of Denver for the disabled.
6. That the Rehabilitation Services Administration fund a design program aids and devices to assist the disabled in physical recreation.
7. That the Denver Public School system initiate a physical recreation program for disabled students.

Housing

Chapter Ten Housing

"We are beginning to recognize that the environment in which a person lives holds a certain message for that person. What makes a home? As I understand it, a home is a place of residence which meets some basic human needs: security, a place where one feels safe, it's a place of privacy, it's a place for personal property, a place where one has a feeling of belongingness, it's a place where one has some self-esteem, it's a place where one can control at least a small segment of one's world. Home is a man's castle, where he is king."

Dr. Philip Roos, executive director of the National Association of Retarded Citizens, speaking before the First National Conference on Housing and the Handicapped (Houston, Texas; September 1974 and Housing for the Handicapped and Disabled.)

INTRODUCTION

The Housing chapter of this document deals with several factors that affect housing for the disabled. The first part discusses the broad scope of housing problems. This is followed by a highlighting of current programs and options (architectural and financial) that address disabled housing. Next is a section on what Atlantis feels is needed in the housing field. The chapter is then completed with a detailed Design Standards Manual addressing the architectural aspects of housing prepared by Dr. Peter Orleans of Morris Architects, Inc., Denver.

THE HOUSING PROBLEM

The major problem facing the disabled person in his or her search for housing, is the lack of existing accessible housing. The Denver area offers a very small rental market for disabled persons. This does not mean that the desired housing must be completely accessible. Although some apartments do not have steps, one must find the enjoyment of his home lacking when bathroom doors are too small, counter tops too high, stoves are out of reach for effective use, and overall movement by a wheelchair is hindered.

The lack of existing housing also creates another problem for the disabled. If accessible housing is found, the location must then be considered. If there are no shopping facilities within the area, a lack of transportation, a lack of recreation, and other necessary services, even the accessible housing may prove to be undesirable.

Because of the need for attendants by severely disabled persons, the nursing home or immediate family has been the most common option for housing. In either case the disabled individual is usually isolated from society in general. Attempts to build transitional or halfway living arrangements are only desirable if the number of units and corresponding residents is kept low (less than ten units - 15 to 20 persons). This type of structure with ten units or less is, however, next to impossible to construct is given the current financial programs for building. Only larger projects (above 30 units) are economically feasible and this, once again, creates the concentrated "nursing home" setting.

The proximity of medical facilities is not a high priority item in selecting housing. The Atlantis Early Action Program, located one block from the Denver General Hospital System's Westside Health Center, has shown that close proximity can be an advantage in medical care, but not a necessity. Disabled are not sick people, although at times their medical needs may be more than those of an able-bodied person.

Housing Education

There is a great need to educate housing professionals on the disabled problems. Lawmakers involved in writing standards and regulations, and architects and developers charged with executing buildings that will be used by disabled, all need to know the whole scope of disabled living, not just minimum design specifications.

The lack of education is illustrated by a random check carried out by the planning staff on knowledge of a new Colorado code affecting multi-unit housing. A new Colorado law, House Bill 1125, took effect July 1, 1976 and extends public building construction requirements to certain privately funded buildings. It mandates that new multi-unit apartment buildings must have accessible units included for the disabled. The ratio of accessible units to regular ones is 1 for 8-14, 2 for 15-21, 3 for 19-35 and so on. In checking with various agencies, it was shown that very few, if any, were aware of the law. The City Building Inspection Department, State Attorney General, and the City Attorney are examples of those who were not aware. Architects, contractors, inspectors and private individuals could become knowledgeble in a number of ways. Letters, ads, inserts into the codes, or information presented along with building permits all could accomplish the task.

Landlords and apartment owners also need to know that minor changes in apartments can retain disabled persons as steady renters or be useful in renting to other disabled persons. Owners also need to realize that accessible apartments can be rented by able-bodied persons as well.

It should be anticipated that not all persons will willingly accept the severely disabled as neighbors. Some people fear a harmful influence on their children, on the character of the neighborhood, or effect on property values. Unless an education program is carried out, citizen's opposition to housing for the handicapped in the neighborhood can be generated.

Common Barrier Problems

Important changes are being made in the housing field that affect inspectors, developers, architects and consumers, but they do little good when none of these people know about them.

The following is a list of common architectural barriers than can interfere with a handicapped person in his everyday life.

I. Approaches to Buildings

A. Parking - Spaces are often too small to permit transfers to wheelchairs. They are not always level and there can be a curb or step between the space and walkway.

B. Approach - Street between parking space and building entrance. No curb cuts or traffic light at crossing. Curbs cut blocked by a car. No snow removal. Ramps often are too steep.

C. Entrance - Doors are too narrow for wheelchairs and often there is not enough room between the outer and inner door.

D. Rest Rooms - Accessible rest rooms can be three floors down, or for the other sex only. Two doors in sequence situated so wheelchair users must have both doors open at the same time to pass through.

E. Water Closets - Toilet stall door too narrow to admit a wheelchair. Seat is too low. No grab bars.

F. Lavatory - Clearance below bowl too small. No insulation under bowl or over hot water pipes. Towel bars, soap dispensers, mirrors, are too high.

G. Water Fountains - Too high, in location too narrow for a wheelchair

H. Pay Telephones - Often are out of reach and booth inaccessible

J. Controls - Windows, draperies, heat and lights and fire alarms are out of reach, or so constructed as to be inoperable by those with physical or coordination disabilities.

Other barriers facing the handicapped person that need to be removed by making people, architects, contractors, and others aware of the laws are listed below.

2. Within Buildings

A. Stairs - Steps open or with projecting nosing under which toes may be caught. Handrails too high or low to use effectively.

B. Elevators - Cab is too small for movement of chair. Cab floor often out of alignment with building floor. Controls are out of reach.

C. Floors - Between different parts of the building not level and connected by steps.

D. Kitchen - Cabinets and cooking areas reached only by parking wheelchair parallel to counter. Storage areas are too high or too low.

E. Bathroom - Showers without grab bar, seat, safety controls, water overflow controls, no-slip surface.

F. Bedroom - Bedrooms too small for maneuvering wheelchair.

All of the problems listed need to be solved for successful disabled housing. One of the keys seems to be, simply, education. The technical aspects of disabled housing have, for the most part, been addressed many times over and generally, in theory, solved. The major problem now is disseminating the information to the professionals in the field.

CONSTRUCTION OPTIONS

During the Atlantis Planning evaluation of the National Association of Housing and Redevelopment Official's Housing for the Handicapped and the Disabled, the Architectural and Site Planning evaluation Group analyzed designs of housing, the options available, the economic factors and the individual needs of the consumer. One key question that resulted from the group asked, "How can each aspect (site, structural type, location and design) of housing be matched to a specific disability?" To answer that question, a multi-faceted response is necessary: (a) define all classifications of disability, (b) match housing requirements to each disability defined, (c) determine all available alternatives related to site selection, structural type, location, design, etc., (d) interrelate b and c above, (e) match the resulting housing to the specific individual. A less complicated, yet more expensive, answer to the question would be to build new or rehabilitate existing housing for a specific person and his/her disability. Another feasible answer suggests that housing could be built or rehabilitated to meet minimal accessibility standards and then utilize individual aids (mechanical devices) to adapt the housing to persons with different types of disabilities.

In planning for future housing on an individual basis, there are three basic methods one can use to meet personal needs in housing. They are New Construction, Substantial Rehabilitation and Existing Housing.

New Construction

The easiest solution is to build new housing. This can be very costly depending on individual needs. A number of things must be considered before construction is even started. The terrain of the land and site location must be right to allow easy conveyance not only at home, but to nearby services such as stores, transportation, employemnt and other needs. Reliable architects and contractors must be obtained, preferably familiar with disabilities. If multi-unit housing is being built, complicated financing has to be arranged from one or a variety of sources.

Positive reasons for New Construction

1. Maximum design flexibility
2. Varied site selection
3. Longer economic life on the mortgage
4. Less maintenance (Five years)
5. Mortgage flexibility
6. Advantage in locating near existing services
7. More liveable

Negative Reasons

1. Cost is higher for site and construction
2. Long term planning and construction time frame

Substantial Rehabilitation

The second method is to remodel. If the unit is owner-occupied, this way may be very feasible. Priority changes may be made first, with secondary changes completed when affordable. The cost for rehabilitation is not as high as new construction, but the change options may be limited.

Positive reasons for substantial rehabilitation

1. Less cost than new construction
2. Some design flexibility
3. More square footage per dollar
4. Less time to occupancy
5. Visually see what the structure is like
6. More liveable

Negative reasons

1. Must comply with revised city codes
2. Limited mortgage dollars available
3. Maintenance
4. Difficulty of same rehab activities and structural constraints

Existing Housing

The third method is to utilize existing housing. The individual is allowed only a minimum of accessibility changes, if any. Due to the turnover in renters, most landlords will not allow major changes.

Positive reasons for existing housing

1. No pre-occupancy costs
2. Immediate occupancy
3. Greater choice in location
4. Visually see what the structure is like
5. If rental, no long term commitment

Negative reasons

1. Not necessarily accessible
2. Existing amenities may inflate acquisition or rental cost
3. Lower availability of accessible units

HOUSING FINANCING

The so called American Dream is to have a house with a yard and a white picket fence. People want a house for a variety of reasons, but the ownership of a single family house is becoming increasingly more expensive and out of reach. There is no difference between able-bodied and disabled in their needs, wants, and desires for housing. The differences are of a physical nature due to accessibility and usage problems.

The majority of the severely disabled in the Atlantis target population are in the lowest of income brackets and generally can't afford to own their own housing. The rental market offers a different picture mainly because of HUD's Housing and Community Development Act of 1974, Section 8. This program, which will be described in detail later, pays the balance of a person's rent above 25% of his income up to the fair market rent levels. Other advantages of Section 8 allow one to retain other benefits he or she may already be receiving, (i.e. Medicaid, SSI and so on). The accessibility factor however, still comes back to haunt the disabled. One idea to help solve this problem on the rental market would be a one-time accessibility grant to disabled individuals for minimal rehabilitation of rental units. This would give disabled individuals the opportunity to acquire decent accessible housing and correspondingly increase the overall amount of accessible units. The inherent draw-back in such a move would be that the work would be performed on a non-owner occupied units and there would be a need for an extensive landlord and apartment management education process.

New construction can also be associated with the Section 8 process. Problems arise because a substantial number of units generally must be built at one time to achieve an acceptable cost per unit price that would keep rents within the standardized fair market rates. This is fine from an economic point of view, but less than desirable from a sociological viewpoint. It promotes an institutional feeling, restricts integration with the rest of the community and is regressive in learning experiences. One alternative would be to create a new construction package of about five clusters with eight to ten units each. This could keep the construction cost per unit low, and keep the number of disabled persons to fifteen or sixteen at each cluster. Problems with this approach could be increased land acquisition costs and a longer lead time in putting the more complex proposal together. Regardless of the approach used, whether under Section 8 New Construction or the Section 202 loan program, (explained later), making the cost-benefit ratio come out positive and within the fair-market rent levels is difficult and next to impossible when the number of units desired is less than ten per site.

An example for a single five unit cluster illustrates the point. The following figures may be high, but due to uncertainty in construction and acquisition costs they are not unrealistic.

Acquisition	
13,000 square feet @ $2.00/foot (13,000 required by zoning)	$ 26,000
Construction	
5 X 850 square feet units @ $35.00/foot	148,750
Lounge area - 400 square fee @ $35.00/foot	14,000
	$162,750
Total	$188,750
Financing	
40 year mortgage @ 9.25%	
Monthly payment	$1,493.00
Per Unit (mortgage payment)	298.60
Utilities	35.27
Management @ 6%	17.88
Maintenance @ 5%	14.90
Insurance @ 3%	8.94
Total Monthly Payment	343.76
Hud Fair Market Rent	305.00

These are high figures but not unrealistic. There are, of course, some examples of organizations making similar plans work with the fair market rents. If the land can be donated or acquired inexpensively, the construction cost held to around $25.00/square foot, mortgage acquired at a cheaper rate (8-8.50%), self-management of the units instituted, and insurance and utility rates kept low, the project can definitely come under the fair market rent levels.

KEY PROGRAMS IN HOUSING AND ACCESSIBILITY

Between 1968 and 1974, several major Federal barrier-free design acts became law - each having strong influence within a limited sphere. Public Law 90-480, the Architectural Barrier Act of 1968, seeks to make accessible any structure built or supported by federal funds, except for private residential structures and buildings on military bases that are primarily designed for use by military personnel.

The key thrust of Public Law 90-480 is "that any building constructed of in whole or in part with federal funds must be made accessible to and useable by the physically handicapped." The effectiveness of Public Law 90-480 was limited at first by a lack of enforcement. Public Law 93-112, the Rehabilitation Act of 1973, was passed to help take up this lack. Public Law 93-112 established an Architecutral and Transportation Barriers Compliance Board. The Board's authority was enhanced by amendments contained in Public Law 93-516, the 1974 Rehabilitation Act. It conveys the authority to "conduct investigations, hold public meetings and issue such orders as it deems necessary to insure compliance with the provisions of Public Law 90-480".

Colorado state involvement has been limited in regards to accessibility. The main involvement has been through House Bill No. 1125, described earlier, concerning Public Building Construction Requirements. But there has been little follow-up on this law since its effective date of July 1, 1976.

Local involvement has been mainly through the Denver Housing Authority (DHA) working with HUD on Section 8, rent subsidy. The DHA has been trying to work with HUD on the purchase of duplexes in the North Denver area. DHA has indicated it will rehabilitate some of the units and make them accessible. The current problem is a dispute about relocation costs for owners and former tenants between HUD and the Denver Housing Authority.

Any type of housing will have to contain some kind of rental assistance because of the weak financial base of the disabled population. The following is a brief summary of the most useful assistance programs.

Section 8 - HUD

Advantages: Allows low income people to acquire decent housing for 25% of their income. It gives a developer certain guarantees to pay for vacancies and can be used by both public and private agencies. It can be used in conjunction with new construction, substantial rehabilitation, or existing housing.

Disadvantages: Fair market rents are sometimes too low and disabled persons are not automatically eligible. There is a lag time due to paperwork. Some landlords are not accepting Section 8 tenants.

The following are programs that could be used for new construction or substantial rehabilitation:

Section 202 - HUD

This is a direct loan to a non-profit sponsor for the construction of new housing or substantial rehabilitationfor the elderly or handicapped. Section 8 is automatically included.

Advantages: This is a good program for construction of accessible housing for low income disabled. There is no down payment and the note is for 40 years at a low interest rate. Sponsors do not necessarily need experience in managing such a project. Cluster housing can be financed this way.

Disadvantages: There is a limited amount of money for this program, (Colorado will probably receive only 200 units for 1977). The break even point with the fair market rents is often very close. In order to receive 202 funds, proposals must compete with other developers and there is an extreme amount of red tape involved.

Colorado Housing Finance Authority: Loans for Construction, Rehabilitation, Financing

Colorado Housing Finance Authority offers straight loans and financing for construction, rehabilitation of single family, multi-family or planned unit development housing.

Advantages: There are long term loans available that might be easier to qualify for than conventional loans. Colorado Housing Finance Authority can leverage money with the local Housing Authority to increase the amount of construction money. Colorado Housing Finance Authority is located in Denver, is flexible and can be used with Section 8.

Disadvantages: There is a limited amount of money available and a great amount of time needed to push a proposal through the process. Again, if Section 8 is used, the fair market rents could be too low and make it difficult to break even.

Section 231 - HUD

This is an insuring program HUD offers developers to assist in acquiring conventional loans.

Advantages: Section 231 makes it easier to acquire conventional loans. There is no down payment and it can be used with Section 8. It has the advantages of a conventional loan (see conventional loan).

Disadvantages: Section 231 is only an insuring program and does not provide money. It has to be used with a conventional loan and therefore has the problems of such a loan, and could be more difficult to get.

Section 221 (d) - (3)

This is an FHA insurance program that basically has the same advantages and disadvantages of Section 231.

Programs an individual can utilize for housing:

Section 8 - HUD Rental Assistance

As has been stated an individual or family pays 25% of their income toward rent and HUD pays the balance up to the fair market rents.

Advantages: It lets low income people acquire decent housing inexpensively.

Disadvantages: The market rent levels are sometimes low and the number of slots may be limited. Also, some landlords do not accept Section 8.

Denver Housing Authority Low Rent Housing

The Denver Housing Authority has 4700 apartment units available, some scattered, most in projects for low income persons. Basically the Denver Housing Authority has the same advantages as Section 8 but most of the units are inaccessible.

HUD Assisted Multi-Units Housing

This is a similar program to the Denver Housing Authority. It makes available loans and grants and Section 312 rehabilitation loans. If a low income, disabled, home owner needs to do some structural rehabilitation, this loan and grant program can be a way to achieve it.

Conventional Loans

These would be acquired on the open money market.

Advantages: Less red tape than government programs. Conventional loans usually allows a shorter time between application and final decision. There are many sources such as banks, savings and loan associations, investment houses and otherswith fewer pre-loan regulations to contend with. Also, FHA insurance can usually be tied in.

Disadvantages: There would probably behigher interest rates with no subsidies. The construction would be for a limited income group of occupants which would require extensive proof of economic security. It cannot be a marginal loan. There also could be an extensive downpayment required.

CHANGES NEEDED IN HOUSING

Most levels of government are attempting to remove architectural barriers, but due to personnel training and interpretation of building codes, the change has been relatively slow. Officials, who are too unsure of their ground to interpret barrier-free code provisions fairly, can create the opposite effect from that which was intended and discourage modernization of any sort. Building inspectors must become more sensitive to the social implications of their decisions. Training programs should be designed to have primary impact on the local operating level of code enforcement. This should not only cover architec-designed new construction, but also ways to deal with alteration work of all kinds. Training should also cover the problem of approval of reused building plans, construction without involvement of an architect and building additions below a certain dollar value.

Inspectors should make follow up inspections to ensure continuing barrier-free status. A brief review of inspector training programs shows that the better ones have been at the state level. Massachusetts intends both to train local inspectors and to give broad interpretive powers to its professionally staffed barriers board. Probably every building department ought to have at least one disabled inspector, either as an employee or as an interested volunteer.

The federal, state and local levels need to turn their attention to removing architectural barriers in existing buildings. Nearly all existing buildings are replete with barriers. Initially, most of the legislation as well as court decisions, focused on new construction, but the trend is turning toward making existing buildings barrier-free. Some state codes, like Massachusetts, and municipal codes, such as Chicago, specify that any remodeling on buildings to which the public has access must be made barrier-free. North Carolina has made available a $2 million fund for remodeling state facilities to make them accessible. Such regulations in general recognize three classes of projects:

1. Those projects in which alterations affect a very small area or the extent of alterations over a large area is very superficial.
2. Those projects in which alterations are substantial, such as rewiring and air-conditioning, or entail a major added new structure. In those cases the entire complex of the building must be raised to barrier-free design.
3. Those intermediate situations in which the work is substantial enough to

justify barrier removal but not extensive enough to requiré a total adaptation. A typical measure in this instance is to stipulate a cost percentage range for barrier removal, usually less than 50% of the cost of the original structure. If the cost of modernization or additions falls in this range only the area of new work must meet barrier-free criteria. However sometimes other key areas, such as entrances and toilet access, must be accomodated as well.

Some legislation has given an incentive for barrier-free design to private buisness in the way of tax credits for omitting or removing barriers. North Carolina now has such a law. Revenue losses are minor, largely because barrier-free provisions cost very little, especially when incorporated during initial construction.

Tax incentives work well for privately held existing buildings, which are often outside of barrier-free laws. This tax credit is something that all three levels of government should work to obtain.

As mentioned before, most architects, developers, and builders are not aware of new codes and standards regarding barriers. The economy of construction costs show that using barrier-free design initially is less expensive than adding the later.

The National League of Cities examined barrier-free costs on three actual buildings typical of those requiring access by the public - a civic center, a city hall, and a multi-story hotel. McGanghan and Johnson of Washington D.C., the architects retained to do the study, found that in none of the three buildings would the estimated cost of deleting barriers at the initial design stage have exceeded one tenth of one percent of total constructions costs.

The 19 architectural elements that were added or modified to make the barrier-free estimate were:

- Concrete access ramps
- Concrete access bridges
- Access to swimming pools
- Public telephones
- Curb Cuts
- Toilet stalls
- Lavatories
- Door clearances
- Automatic doors
- Audible warnings
- Ramped sidewalks
- Wooden ramps
- Water fountains
- Concrete retaining walks
- Improved grading
- Shower cubicles
- Bathrooms
- Elevators
- Various instrumentation & controls

The architects analyzed seven other hypothetical buildings. These were "designed" to reflect various typical low-rise and high-rise formats. Six of the seven could have been originally built barrier-free for less than 0.5% over estimated construction costs; the seventh, a two-story building, would have cost 2.5% more, as an elevator had to be added. Overall, modifications to make these buildings barrier-free after construction would have cost, at most, 1.0% over original cost. Builders and architects need to be aware that in many cases deleting a barrier can actually net a credit to a building's construction cost.

Most apartments in the Denver area, with minor adjustments in ramping one or two steps and making bathroom doors wider, would have living units reasonably accessible. Here the tax credit mentioned before would become an asset in helping the private sector work to make existing apartments and businesses, accessible.

Some state legislatures recently have acted to prohibit the exclusion of disabled residents through zoning of residential facilities for the handicapped. For example, legislation amending a previous law on the rights of the handicapped in North Carolina, passed in 1975, states:

Right to Housing - "Each handicapped citizen shall have the same right as any other citizen to live and reside in residential communities, homes, and group homes, and no person or group of persons, including governmental bodies or political subdivisions of the state, shall be permitted or have the authority, to prevent any handicapped citizen, on the basis of his or her handicap, from living and residing in residential communities, homes and group homes on the same basis and conditions as any other citizen."

This legislation, which should be a federal law, would prevent local zoning boards from barring citizens from living in neighborhoods of their choosing on the basis of their handicaps alone.

HOUSING FOR ATLANTIS

Atlantis intends to vacate the Las Casitas housing project where the Atlantis residents live and its eight units within the next few years. In the meantime, Las Casitas will continue to function as the transitional setting for those residents needing more assistance than average or making the change from an institution or nursing home to an independent setting. In the long run it would be better for Atlantis to vacate Las Casitas and develop another cluster type housing situation to replace it. The problems surrounding Las Casitas are primarily structural in nature and detract from the services Atlantis is providing. The transition into the project by the Atlantis residents has gone very well. Acceptance has been on a mutual basis. Some initial, but minor, thefts were thwarted by increased security. Cultural differences did not develop, but mutual acceptance did thrive. Occasionally, differences of opinion have arisen between Atlantis and the Denver Housing Authority, but overall they have been kept to a minimum. City and Denver Housing Authority officials have indicated their desire to raze Las Casitas in the near future. The Early Action Program at Las Casitas Homes has, despite its esthetic and structural drawback, several amenities that are assets for independent living. All apartments have outside entrances with only four or five units per building. The apartments are scattered over a two block site with lawns and trees in a semi-park like setting. There are able-bodied residents intermixed in the other apartments which eliminates any segregated disabled ghetto feeling. It is, however, the oldest public housing project in the city and was originally intended as temporary housing. Rehabilitation expenses to make the cinder block units accessible came to over $2000.00 per unit in 1975 for minimal improvements. They are the best that is available now for Atlantis' transitional approach to independent living. After a person has moved from a nursing home or other institution into the Atlantis Service system, they would most likely move to Las Casitas. There, generally over a years' time, they would acquire independent living skills not needed for life in a nursing home, but necessary to live independently. After a years' time, a move is ready to be made to a semi-accessible apartment in the community, probably with a disabled roommate, and receive attendant services from the Atlantis mobile attendants. As documented in other sections of the report, moving from a nursing home to a private residence creates a maze of paperwork and financial assistance transfers. The accessible apartments are only one part of the process.

The first choice for Atlantis should be a layout similar to Las Casitas, but not in a housing project. By acquiring existing housing and rehabilitation via Vocational Rehabilitation funding, there are no mortgage costs or long term commitments.

The second choice, is to put together a complex development package for new construction. Problems in financing have been previously discussed and it will take dogged determination to put such a package together. An alternative to Atlantis becoming the developer in new construction would be a third party profit or non-profit organization from which Atlantis could lease. This would relieve Atlantis of the financial stress in development and long term mortgages. The

Denver Housing Authority has expressed a desire for a planned unit development approach for new construction which also could nicely accomodate Atlantis.

For non-clustered housing, Atlantis can do little in the way of new construction. The best alternatives are to encourage enforcement of the state law requiring a ratio of accessible units in new construction and comprehensive filing and referral of private accessible units. Again the Denver Housing Authority has an attractive program in scattered low rent housing. This was described earlier, but briefly the program allows the Denver Housing Authority to purchase dwellings--mostly duplexes in endangered neighborhoods--rehabilitate them to code, and rent to low income residents.

One solution to the dilemma of making small scale (units) developments economically feasible would be to build a large complex and then rent to only a few disabled and the rest to low income able-bodied. The problem is that it places Atlantis in an undesirable management position at this time.

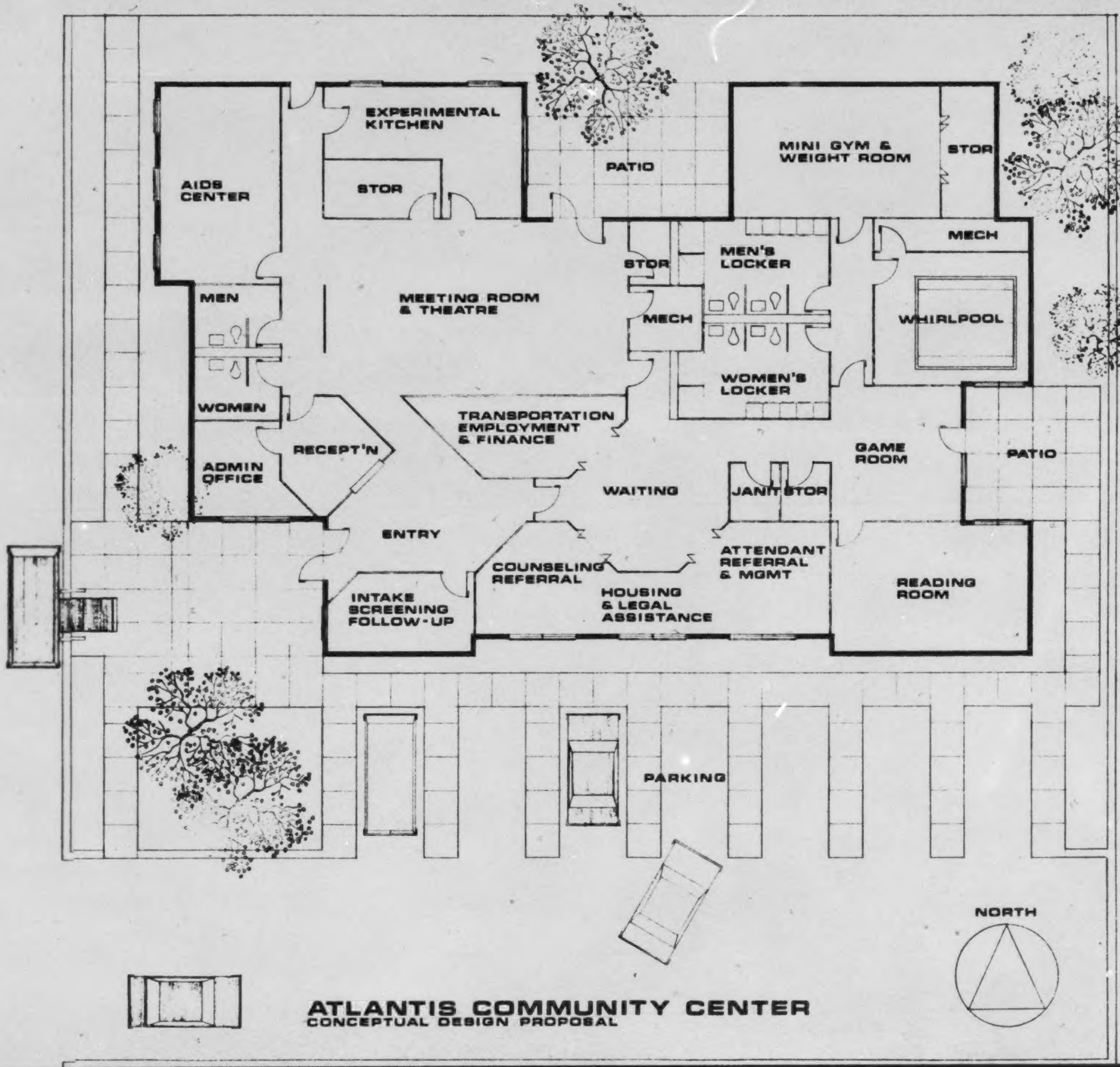
One brief thought on the management of any housing program for the disabled. Whether outside professional management is utilized or if it originates from within the organization, the ultimate control and regulatory power must come from the residents themselves. This is not to say that outside advice is not to be entertained but only that for true independent lifestyles, the residents viewpoint should be in the majority.

A final note is the use of mobile homes. The newer models are wider and can be altered moderately inexpensively to be accessible. This is a relatively new field for disabled housing but has definite possibilities.

One step that Atlantis can take immediately to help in the existing disabled housing market is to undertake a referral system for the disabled in Denver. It could operate from a multi-purpose service center. Such a center would provide assistance and referral to the disabled community at large through an information line that could also double for medical and attendant problems. Listings of employment opportunities, job development, accessible apartments, homes and buildings would be available at the Center. In addition, the multipurpose center would be utilized for counseling, adult education, recreation, independent living skill training, and any other activity or service the disabled see as necessary toward independent living and vocational rehabilitation. The housing referral system could have information on location (including shopping and transportation) accessibility of rooms, extras included in the apartment (laundry, elevators), and price of the unit. Other information would include whether the landlord allows minor changes, and if he would be acceptable to Section 8. A good working relation or call back system with the management company or landlord would report any units available. Information on how and where to obtain Section 8, rent subsidy could be provided also.

The need for a central location to gather, not only housing information, but also data from all areas supporting independent living has been documented in preceding chapters of the report. The needs assessment conducted by Dr. Bernie Jones of Social Change Systems, Inc., substantially supports the need of such a facility. Peter Orleans of Morris Architects drafted the conceptual design for a multi-purpose center that follows. The space utilization reflects the needs as prioritized in a workshop conducted by the planning staff using the "nominal group methodology."

There are numerous documents on housing for the disabled. Among the best, however, is the NAHRO Guide, Housing for the Handicapped and Disabled, written by Mrs. Marie McGuire Thompson of the International Center for Social Gerontology. The Atlantis Planning evaluation and field test of the Guide was critical from the social service viewpoint, but the Guide has outstanding information on the


EXPERIMENTAL KITCHEN
STOR
AIDS CENTER
PATIO
MINI GYM & WEIGHT ROOM
STOR
MECH
MEN'S LOCKER
STOR
MEETING ROOM & THEATRE
MEN
MECH
WHIRLPOOL
WOMEN'S LOCKER
WOMEN
TRANSPORTATION EMPLOYMENT & FINANCE
RECEPT'N
GAME ROOM
PATIO
ADMIN OFFICE
WAITING
JANIT
STOR
ENTRY
ATTENDANT REFERRAL & MGMT
COUNSELING REFERRAL
HOUSING & LEGAL ASSISTANCE
READING ROOM
INTAKE SCREENING FOLLOW-UP
PARKING
NORTH

ATLANTIS COMMUNITY CENTER
CONCEPTUAL DESIGN PROPOSAL

housing, financing, and management aspects of independent living. Such a comprehensive handbook on housing for the disabled has been long overdue. All the traditional problems and abuses suffered by the disabled have been well documented, but the solutions have been short in coming. The NAHRO Guide is the first significant attempt to sort through the magnitude of information and then to present in a cogent and concise manner the necessary facts to a local group that wants to do something about the problem. To the uninformed individuals of any organization, and especially to the consumer, the realm of regulations, guidelines, standards, and forms, spewed forth by all levels of government, appear to be intended as a hindrence, and of little help in creating new living environments for the disabled. The Guide is a must for any organization considering housing for the disabled.

RECOMMENDATIONS

1. Establish an inspector training program on architectural barriers and other problems of the disabled for those people involved in code enforcement.
2. Allow tax credits for the removal of architectural barriers.
3. Create sound zoning legislation that allows group homes in residential neighborhoods.
4. Some program standards should be eased on federal housing programs so severely disabled persons can participate. On HUD's 235 program, a person could be allowed to let his or her rent accumulate into the downpayment.
5. Laws and regulations affecting accessibility and housing for the disabled need to be dispersed to developers, contractors, architects and other related persons so it is clearly understood what is required.

6. A one time accessibility grant per person should be initiated for non-owner-occupied dwellings to increase the availability of accessible units.

7. HUD's Section 8 should be expanded to specifically include the severely disabled thus acting as an aid for independent living.

DESIGN STANDARDS FOR HOUSING
FOR SEVERELY PHYSICALLY DISABLED PEOPLE

Prepared For

ATLANTIS COMMUNITY, INC.

by

PETER ORLEANS

MORRIS ARCHITECTS

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CHECKLISTS

INTRODUCTION

Design, Disability and Handicap

It is apparent from a review of materials devoted to design for the disabled that the dominant concern of both the architectural profession and the disabled community to date has been to sensitize designers to the ways in which design decisions have produced handicapping environments for wheelchair bound disabled persons.

Writing about the difference between disability and handicap, Goldsmith has said:

> "A disability is a condition of impairment having an objective aspect that can usually be described by a physician" and "A handicap is the cumulative result of the obstacles which disability interposes between the individual and his maximum functional level."
>
> A handicap has to be assessed according to the demands of the situation in which the individual finds himself. Even a severe disability need not in specific circumstances be a handicap...A chairbound person is not handicapped if the work which he is doing can be undertaken from a wheelchair...
>
> A physical (characteristic) is therefore a physical handicap only where it constitutes a barrier to the achievement of specific goals.

Various standards have been developed to minimize the handicapping effects of architectural barriers, and by and large when implemented they have resulted in disability responsive environments. Doors have been widened, reasonably sloped ramps have been constructed and environmental contraols and amenities (from elevator buttons to drinking fountains) have been placed within the reach of wheelchair bound persons.

All of these efforts indicate the minimal conditions that must be met if the independent living requirements of severely physically disabled persons are to be met. However, as guidelines to the design of residential environments for such persons, they are inadequate. They are in fact merely a beginning point.

Place and Activity Access Barriers

We need to distinguish between two very different kinds of barriers. The first has to do with access to a place . Elimination of such a barrier allows one to enter and to passively observe, or to move through the ongoing activities of others. A second more important type of barrier is that of access to activities in a place. Eliminating of place barriers does not necessarily involve the provision of access to activities. The difference is crucial.

The intention of a severely physically disabled person to undertake, unaided, the activities of daily life, rather than occasionally to observe them, requires attention to new and quite different design concerns. Movement from a custodial care and largely passive living situation to the active requirements of independent living necessitates our use of a broader definition of access, and forces our attention to an enlarged set of design concerns directed to the elimination of activity barriers.

Wheelchair and Disability Responsive Design

Design standards pertaining to the creation of barrier free environments typically refer to requirements occasioned by the dimensional characteristics of the wheelchair. They are calculated to insure wheelchair access to, and mobility within a place. They do not, however, accomodate the activity requirements of wheelchair bound persons with differing physical disabilities. The placement of a light switch at a minimum height of 3' 6" above the floor to insure accessibility for a wheelchair user is a different matter from the specification of a rocker switch at that height for an individual who cannot manipulate an ordinary toggle switch. The provision of a 3' 0" clear opening doorway to provide accessibility for a wheelchair user is a different matter from the specification of a lever type door handle on that door for an individiual who cannot manipulate an ordinary twist type door knob.

Summary

Briefly, if the design of a residential environment is to eliminate, or at least minimize, the handicapping conditions confronted by severely physically disabled individuals it must account for (1) barriers typically associated with the use of a wheelchair, (2) variations in small motor coordination of differently disabled wheelchair bound persons, and (3) individual differences in appropriate daily living activities. These are primary concerns if we are to respond to the residential independent living requirements of the diverse membership of the Atlantis Community.

Organization of This Chapter

The first section, GENERAL DESIGN CONSIDERATIONS, Addresses concerns that apply to all design for wheelchair bound disabled people. As such it is restricted to design considerations associated primarily with wheelchair use. The second section, SPECIFIC DESIGN CONSIDERATIONS, explores some of the environmental problems associated with particular physical disabilities and suggests the importance of disability responsive design. The third and final section, NEW CONSTRUCTION AND REHABILITATION, consists of two parts. Typically we buy or rent housing and then proceed to adapt it to our personal requirements and preferences. When our ability to do this is financially restricted, our options for altering the housing are limited. Therefore, the first part of this section is devcted to assessing priorities in the modification of existing housing. The second part of this section consists of two checklists, one for the kitchen and one for the bathroom. The checklists assume ideal conditions and proceed to lay out design standards to achieve them.

GENERAL DESIGN CONSIDERATIONS

This section is devoted to a detailed discussion of those aspects of design for the physically disabled that apply irregardless of particular incapacities. Consideration of the need for an enlarged minimum net floor area and of the functional arrangement of spaces relate to general spatial implications of wheelchair use. Somewhat more specific to the tradidional concern with creating a barrier free environment is the consideration of barrier elimination, the provision of accessible storage and special attention to sight lines and fixture placement. Finally, the readers attention is called to the need to provide a controlled environment particularly adapted to the needs of severely disabled persons.

General Design Considerations: Minimum Net Floor Area

Probably the single most important overall design consideration, especially in new construction, in housing for a physically disabled person, is the provision of adequate space to accomodate wheelchair clearance, transfer, and storage. Selwyn Goldsmith, in DESIGNING FOR THE DISABLED, estimates that as much as a 9% increase in area may be required for one person dwelling units designed for a chairbound disabled person. At the same time it is important to provide for necessary additional space and because additional space is expensive, it must be appropriately planned.

Felix Walter, in AN INTRODUCTION TO DOMESTIC DESIGN FOR THE DISABLED, comments as follows: "In considering the relationship of plan elements, it is essential to set aside the traditional conception of a series of 'cell' rooms connected together by corridors...There is good reason to knit together more closely, living, sitting, dining and sleeping areas, because the floor area eliminated by the omission of corridors and lobbies will provide much of the additional manuevering space in the bathroom and kitchen and around free-standing and built-in furniture." Thus, where possible, as in the case of new construction, ample space should be provided, especially in living as opposed to circulation areas in the dwelling.

General Design Considerations: Functional Arrangement

A less obvious, but nevertheless critical, design consideration has to do with the arrangement of spaces, the layout of the dwelling unit. This matter of functional arrangement is best accomocated in new construction. However, existing spaces can be re-designed as part of a rennovation scheme or even re-defined through furniture placement. Felix Walter strongly urges merging spaces, which often means defining a space as a multi-purpose space, one in which a variety of activities are appropriate. Among the advantages of such a strategy, according to Walter, are the following:

1. The resulting simplified plan shape offers economies in building construction and cost. This is probably truer of new construction than of rehabilitation of existing housing.
2. An even room temperature can be maintained throughout.
3. Some of the floor area saved through the elimination of halls and corridors can give added space needed elsewhere, e.g., in the bathroom and in the kitchen.
4. Where one individual is obliged to spend some daytime hours in bed

there is less sense of isolation than in the traditional separated bedroom.

5. It reduces housework.

6. For those forced to stay indoors during bad weather, there is more unobstructed space in which to move about.

In considering the arrangement of spaces in the dwelling, the kitchen-dining relationship is of paramount inportance. Both Goldsmith and Walter stress that dining space should be provided in the kitchen. Goldsmith comments, "...it is essential that space should be available for meals to be taken in the kitchen, or in a dining recess that is immediately accessible from the working area of the kitchen...The incorporation of the dining area into the kitchen in dwelling units for disabled people would not involve any compromise of amenity values. It could bring advantages by making available a larger clear space for wheelchair maneuver than if kitchen and dining areas were separate."

General Design Considerations: Eliminating Barriers

Although our primary concern in assembling design information, as it relates to housing for severely disabled persons, has been to call attention to the need for the architect to attend to the requirements of a particular individual, rather than designing for the general condition presupposed by most design standards documents, it would be well to review the barriers most likely to be found in residential settings, particularly threshold treatment, ramp requirements and door clearances.

Threshold Treatment

Vertical level changes greater than 1/2" obstruct the small wheels of a wheelchair (Mace). Aside from the obvious need for curb cutting, this fact has serious condequences for threshold treatment. Walter suggests that a level surface between outside and inside can be weatherproofed by using a Neoprene type cushion seal and/or a projecting canopy kept as close to the door head as possible. Alternatively, a perforated metal grating can be set flush with the outside paving adjoining the door with a drainage channel installed beneath to prevent water penetration. See the attached illustration for examples of these solutions.

Ramp Requirements

The stope of a ramp may not exceed 8.33% (1" rise in 12" run). Any ramp of such a slope should have handrails on both sides (as well as wheel curbs). Although most design standards require only one handrail on a 8.33% slope ramp, the preferred arrangement would be to have two handrails as well as wheel curbs.

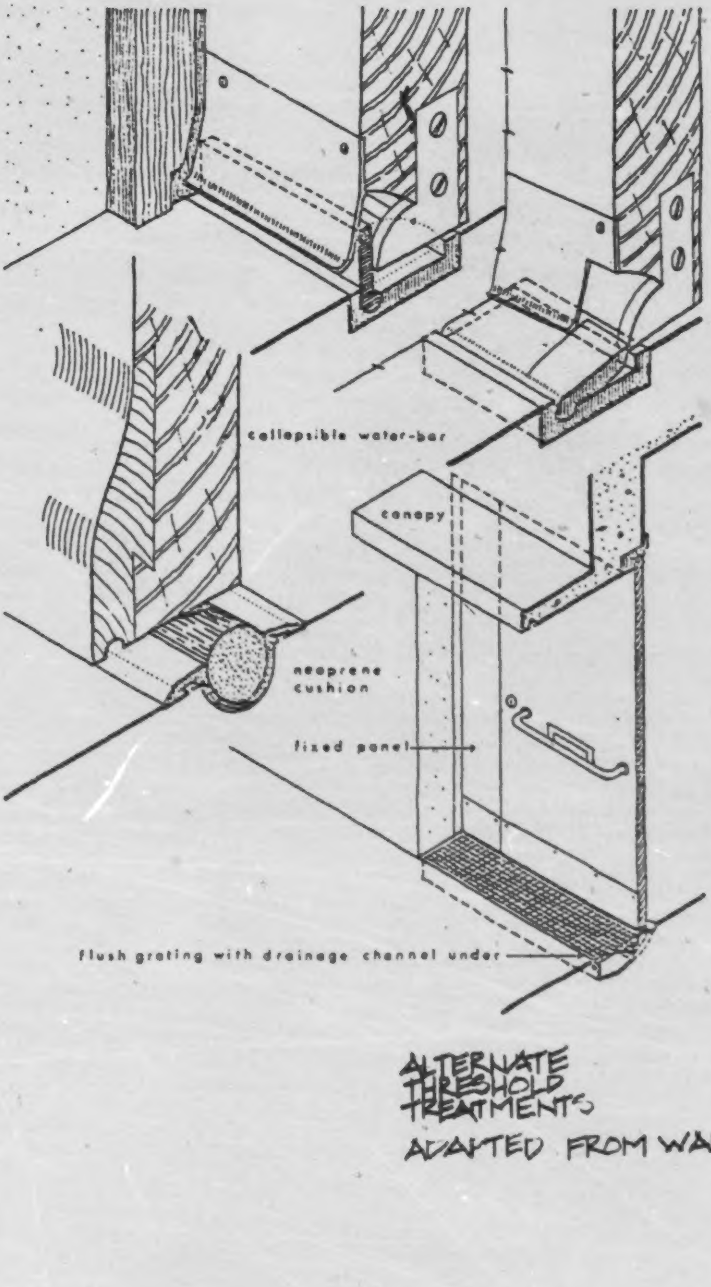
The preferred slope is 5.00% (1" rise in 20" run). Such a ramp does not necessitate the use of handrails, though wheelcurbs should be installed.

Although an 8.33% slope has shorter horizontal distance, a 5.00% slope is much easier to negotiate.

A level platform at least 5' 0" X 5' 0" should be provided at any door opening approached by a ramp. The platform should extend a minimum 2' 0" on the side from which the door opens.

Door Clearance

Door clearance data are concisely summarized by Chasin and Saltman as follows: "The clear opening (the measured width of the actual door opening less the two inches taken up by the thickness of the door itself, standing wide open) must, as a minimum, be 27 inches for head on approach. A livable


collapsible water-bar
canopy
neoprene cushion
fixed panel
flush grating with drainage channel under

ALTERNATE THRESHOLD TREATMENTS
ADAPTED FROM WALTER

clear opening would be 30 inches, for a head on or slightly oblique approach. The best clear opening is 34 inches (that is, a 36 inch actual door opening). ...A wheelchair with footrests will not be able to turn from a 36 inch wide hallway into a 27 inch doorway, clear opening, without assistance. For such turning, the doorway should be at least 30 inches, preferably 34 inches clear opeing."

General Design Considerations: Accessible Storage

Access to a variety of storage arrangements has been carefully researched by the Stifelsen Fokus group in Sweden. These researchers point out the "the capacity for movement and strength of the disabled can vary from complete inability to normal estimates." They go on to suggest that the "grip area" is determined by two major factors: (a) shoulder position of the wheelchair occupant, and (b) limitations of wheelchair construction.

In documenting the findings of their research the Stifelsen Fokus researchers illustrate the accessible touch area in a variety of situations. In each case, however, the illustrations refer to "a person without disablement in the arms, and with a fixed shoulder position." (emphasis added) Thus, the design of storage units for chairbound disabled persons, based on this information, applies only to general conditions; "individual variations (in movement and strength capabilities) can only be considered by analyzing the status of each handicapped person."

Bearing this caution in mind, and recognizing that refined design requires individual assessment, a number of general design principles can be drawn from the findings of the Stifelsen research:

1. Cabinet space below a counter is an obstacle. It prevents access

to the counter itself and to storage cabinets hung from the wall above the counter (compare figures 1.1 - 1.2 with 2.1 - 2.2; compare 4.1 - 4.2 with 5.1 - 5.2). This is the case even when wall hung cabinets are extended as in figures 14.1 and 14.2.

2. By positioning the wheelchair parallel to the counter, access to both the storage units above and to the counter itself can be increased (but it is likely that the body position is awkward and uncomfortable). The extent of increased accessibility is shown in figures 3.1 - 3.2, 6.1 - 6.2, 9.1 - 9.2, 12.1 - 12.2, and 15.1 - 15.2.

3. Standard under the counter storage should be minimized. It is almost useless for a wheelchair bound disabled person, and it interferes with access to the counter itself and to wall hung storage above. This is illustrated in figures 7.1 - 7.2, 8.1 - 8.2, and 9.1 - 9.2.

4. Probably the most generally accessible storage arrangement for a wheelchair bound disabled person is a utility closet with free space under an adjacent counter (compare figures 10.1 - 10.2 and 11.1 - 11.2 with any other arrangement). If under-the-counter free space is not feasible, parallel placement of the wheelchair still yields considerable access to such a utility closet (as shown in 12.1 - 12.2).

Many designs for disabled persons, particularly kitchen designs, include lazy-susan-type under the counter storage in a corner. Presumably this is the result of attempts to provide a continuous counter surface. However, there is general agreement that corner storage is probably the most inaccessible form of storage for a wheelchair bound disabled person. For this reason, and because of the added expense of the lazy susan fittings, this arrangement is not recommended.

Counter
Touch Area

Wheelchair at a right angle to the counter. No cupboard below.

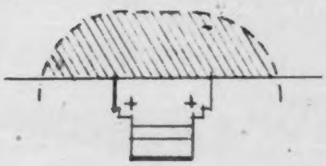


Figure 1.1

Counter
Touch Area

Wheelchair at a right angle to the counter. Cupboard below.

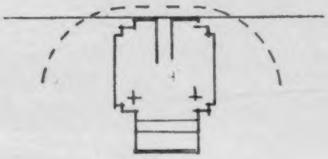


Figure 2.1

Counter
Touch Area

Wheelchair parallel to the counter.

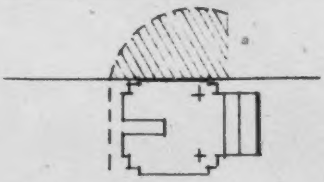


Figure 3.1

Counter
Touch Area

Wheelchair at a right angle to the counter. No cupboard below.

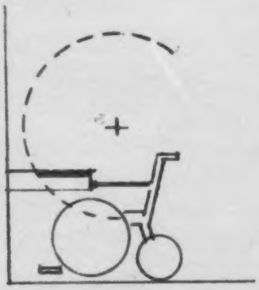


Figure 1.2

Counter
Touch Area

Wheelchair at a right angle to the counter. Cupboard below.

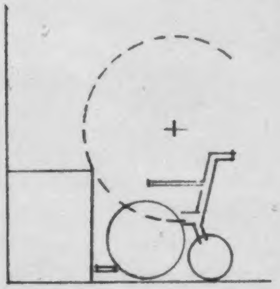


Figure 2.2

Counter
Touch Area

Wheelchair parallel to the counter.

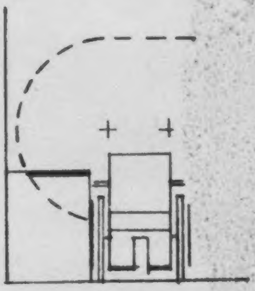


Figure 3.2

Wall Cabinet
Touch Area

Wheelchair at a right angle to the counter. No cabinet below.

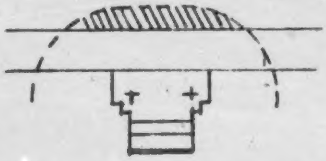


Figure 4.1

Wall Cabinet
Touch Area

Wheelchair at a right angle to the counter. Cabinet below.

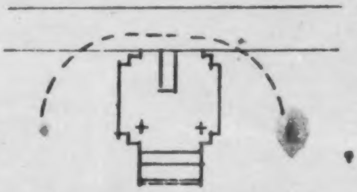


Figure 5.1

Wall Cabinet
Touch Area

Wheelchair parallel to the counter.

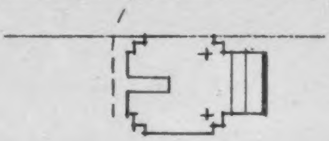


Figure 6.1

Wall Cabinet
Touch Area

Wheelchair at a right angle to the counter. No cabinet below.

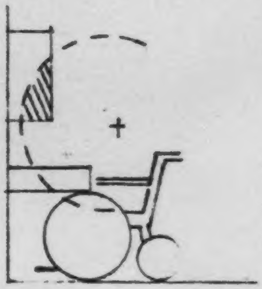


Figure 4.2

Wall Cabinet
Touch Area

Wheelchair at a right angle to the counter. Cabinet below.

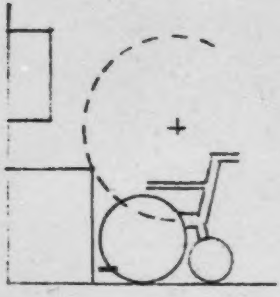


Figure 5.2

Wall Cabinet
Touch Area

Wheelchair parallel to the counter.

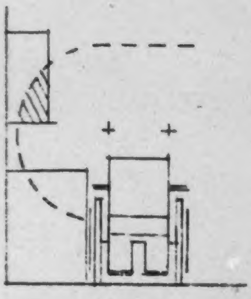


Figure 6.2

Counter Cabinet
Touch Area

Wheelchair perpendicular to counter. Free space at side of cabinet.

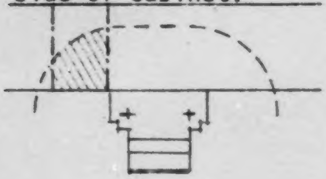


Figure 7.1

Counter Cabinet
Touch Area

Wheelchair perpendicular to counter. No free space at side of cabinet.

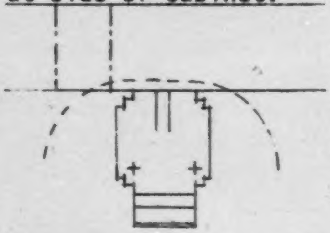


Figure 8.1

Counter Cabinet
Touch Area

Wheelchair parallel to the counter.

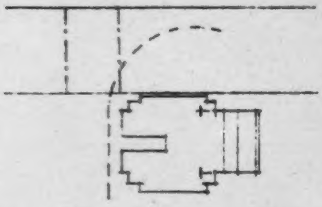


Figure 9.1

Counter Cabinet
Touch Area

Wheelchair perpendicular to counter. Free space at side of cabinet.

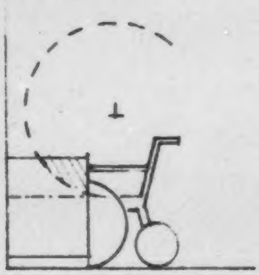


Figure 7.2

Counter Cabinet
Touch Area

Wheelchair perpendicular to counter. No free space at side of cabinet.

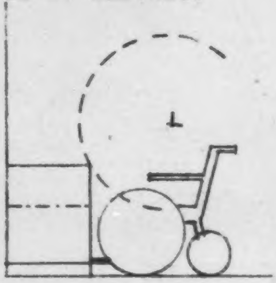


Figure 8.2

Counter Cabinet
Touch Area

Wheelchair parallel to the counter.

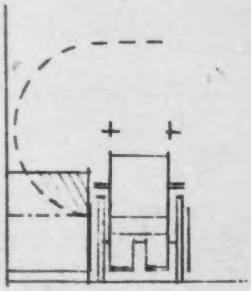


Figure 9.2

Utility Closet
Touch Area

Wheelchair perpendicular to and at the side of the closet. Free space under counter.

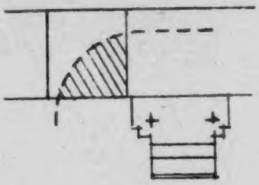


Figure 10.1

Utility Closet
Touch Area

Wheelchair perpendicular to and at the side of the closet. No free space under counter.

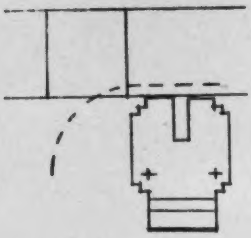


Figure 11.1

Utility Closet
Touch Area

Wheelchair parallel to the closet.

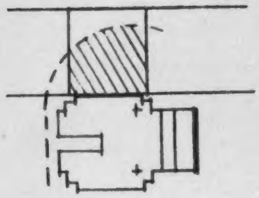


Figure 12.1

Utility Closet
Touch Area

Wheelchair perpendicular to and at the side of the closet. Free space under counter.

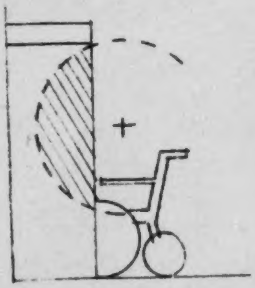


Figure 10.2

Utility Closet
Touch Area

Wheelchair perpendicular to and at the side of the closet no free space under counter.

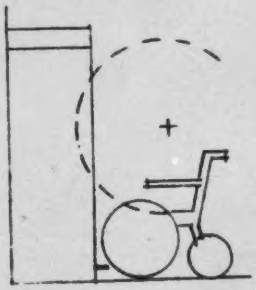


Figure 11.2

Utility Closet
Touch Area

Wheelchair parallel to the closet.

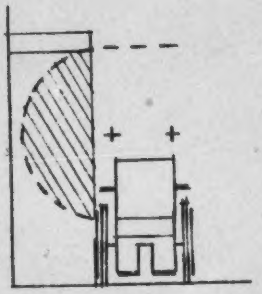


Figure 12.2

Extended Wall Cabinet
Touch Area

Wheelchair at a right angle to the counter. No cabinet below.

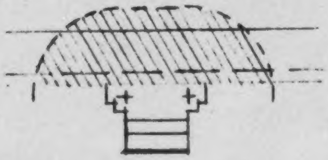


Figure 13.1

Extended Wall Cabinet
Touch Area

Wheelchair at a right angle to the counter. Cabinet below.

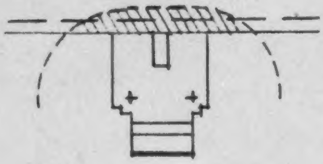


Figure 14.1

Extended Wall Cabinet
Touch Area

Wheelchair parallel to the counter.

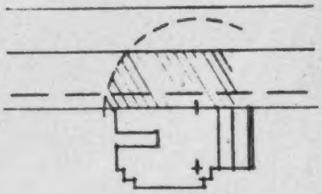


Figure 15.1

Extended Wall Cabinet
Touch Area

Wheelchair at a right
angle to the counter.
No cabinet below.

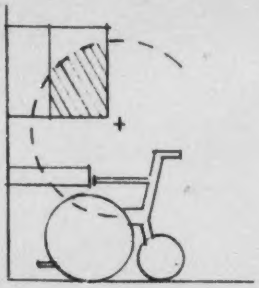


Figure 13.2

Extended Wall Cabinet
Touch Area

Wheelchair at a right
angle to the counter.
Cabinet below.

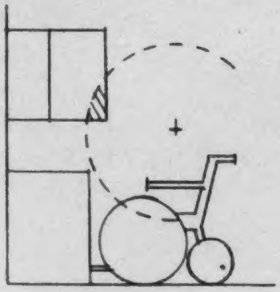


Figure 14.2

Extended Wall Cabinet
Touch Area

Wheelchair parallel
to the counter.

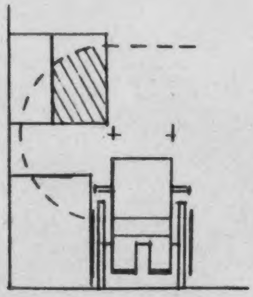


Figure 15.2

NOTE: FIGURES 1.1 THROUGH 15.2 HAVE BEEN
ADAPTED FROM BRATTGÅRD

General Design Considerations: Sight Lines/Fixture Placement

Apart from the particular disabilities of wheelchair bound persons which require specialized design there are elements of residential design that are directly tied to the fact that the occupant is in a seated, rather than a standing, position. Accordingly, particular attention must be given to the location of such amenities as windows and mirrors and to the placement of control elements (e.g., electrical outlets, light switches, stove and sink controls, window controls, thermostats, meters, etc.).

Sight Lines

The mean eye level of the wheelchair user is 3' 9-1/2". A window sill height of 2' 0", with a maximum of 2' 6", is preferred. Transoms should be at levels which do not obstruct vision. Above the first floor, the seated person looks down to see the view outside, and where regulations permit, window sills ought not to be higher than 2' 0" above floor level. However, for safety reasons no opening part of an upper story window should be below 2' 9" above floor level. (Goldsmith).

Mirrors should be fixed at a height so that the base is no more than 3' 4" above the floor. The mirror need not extend more than 5' 0" above the floor (Mace). Where this is not possible an alternative solution is to tilt the top of the mirror away from the wall.

Fixture Placement

Preferred height for light switches is between 3' 0" and 3' 6". Light switches adjacent to doors should be horizontally aligned with door handles.

Socket outlets low on the wall are almost impossible for the severely disabled wheelchair bound user to reach and manipulate. Such outlets should be located where most needed and fixed at a wall height of between 2' 4" and 3' 0". A useful and inexpensive way of increasing access to existing wall outlets located behind furniture is to use a short extension cord.

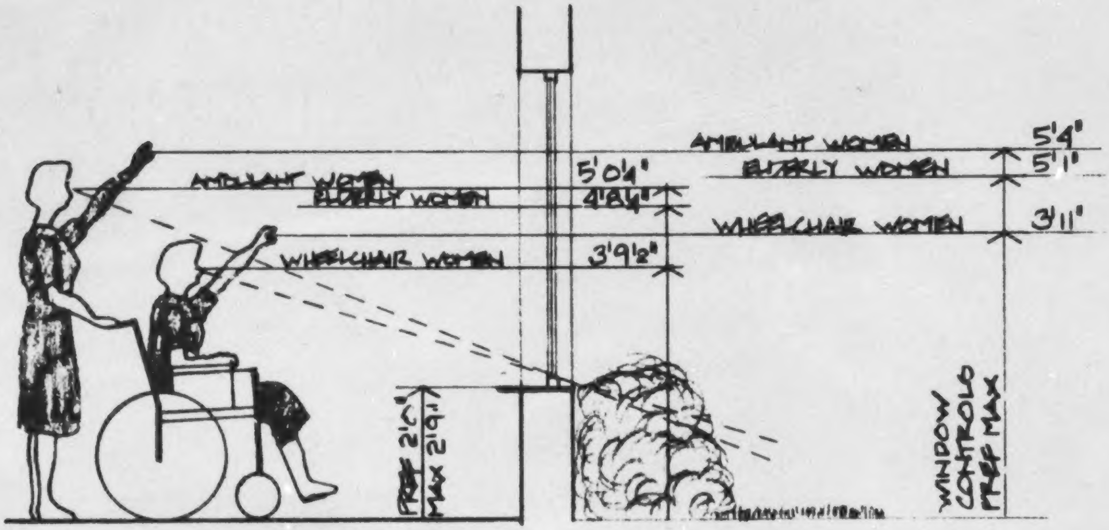
Heating and meter controls should not be lower than 1' 6" or higher than 3' 7". A circuit breaker is preferable to a fuse system simply because it is somewhat easier to manipulate. The circuits should be clearly indicated to eliminate trial and error search. The circuit breaker (or fuse box) must be accessible to the occupant. It should not be located out of doors or in the basement. Gas and electric meters should be accessible as well.

An adjustable thermostat should be fixed at a wall height of between 3' 0" and 3' 6".

Stop cocks controlling incoming water from the main service, hot and cold water supplies, and gas mains should be within wheelchair reach, preferably between 2' 4" and 3' 6" high.

Stove and sink control placements are critical, especially where wheelchair clearance is minimal. Such placement is best adapted to the individual requirements of the occupant. Where possible plumbing connections should be flexible to accomodate individualized adaptation, especially in rental housing where occupant turnover is high.

Although wheelchair users can generally reach a heights of 4' 9", obstructions (e.g., furniture, radiators, etc.) are often placed in front of windows interfering with access to window controls. The preferred maximum height of window controls is 3' 11". Selection of controls depends on the incapacity and capability of the occupant and should be individually fitted. Control mechanisms which cannot accomodate an occupants' difficulty with grasping, or lifting, even if placed at the preferred height, will be unusable.


AMBULANT WOMEN
ELDERLY WOMEN
WHEELCHAIR WOMEN
5'0¼"
4'8¼"
3'9½"
PREF 2'0"
MAX 2'9"
AMBULANT WOMEN
ELDERLY WOMEN
WHEELCHAIR WOMEN
5'4"
5'1"
3'11"
WINDOW CONTROLS PREF MAX

SIGHT LINES & WINDOW DATA
AMBULANT, ELDERLY, WHEELCHAIR WOMEN
SOURCE: GOLDSMITH

General Design Considerations: Controlled Environment

Of critical importance to wheelchair bound persons is the ability to control environmental conditions within the home. A properly placed window with inappropriate hardware cannot be opened; a kitchen sink recessed in a countertop placed at an appropriate height, but with inappropriate faucet and controls is unusable. However, apart from such apparently minor, though glaring defects, there are environmental requirements in residential design: the avoidance of drafts, the provision of even, constant, and often warmer room temperatures.

Recommended room temperatures should be maintained between the floor and 3' 0" above the floor. According to Goldsmith, for sedentary people, optimal air temperature is 60° F for the head, 66° F for the hand, and 70° F for the foot. In living areas a temperature of 70° F at a level 6" above floor level is desirable.

The heating installation should be capable of maintaining a minimum temperature of 68° F (Goldsmith). Background space heating alone is generally insufficient for this purpose. It must be supplemented with other means of heating to cope with unexpected drops in temperature.

Goldsmith suggests that the thermal environmental requirements of severely disabled people are satisfactorily obtained by underfloor heating because it does not produce vertical air gradients. Where underfloor heating is employed, the surface temperature of the floor should not exceed 78° F. If underfloor heating is not feasible, perimeter floor heating or ceiling heating can provide the most similar environmental conditions. The disadvantages of these heating methods are that perimeter floor heating takes up valuable wall space (as it should not be blocked by furniture), and ceiling heating running costs tend to be high.

Disabled people, and particularly those in wheelchairs, tend to leave doors permanently open to facilitate circulation. An open door requires no negotiation with the door knob. And, sometimes a doorway which is too narrow can be widened by as much as 2" if the door is removed. However, this practice creates drafts. Local heating to each room with consequent temperature gradiants, accompanied by drafts is not recommended. To minimize drafts, background heating should be provided throughout the home with local heating units strategically placed to permit needed temperature increases.

Forced hot air heating systems, probably the most common form of heating, are satisfactory if caution is exercised to avoid low level drafts and if air outlets are located to offset the effect of cold radiation from windows. Heating by means of radiators may be unsatisfactory because of the problem of cold air currents at the floor. If radiators are used they must be protected to reduce the risk of contact burns.

SPECIFIC DESIGN CONSIDERATIONS

The design of new housing, or the alteration of existing housing, to accommodate the independent living requirements of severely physically disabled people must take into account a broad spectrum of disparate physical disabilities (including, in the case of Atlantis Community members, multiple sclerosis, cerebral palsy, poliomyelitis, spina bifida, and various levels of spinal cord injury involving both quadriplegia and paraplegia). Most of the published design standards ignore the nuances of the refined design required by such a range of physical disability, concentrating instead on wheelchair anthropometrics and wheelchair accessibility. Goldsmith's pioneering work, DESIGNING FOR THE DISABLED, is the standard reference on the subject. But, even here the author is quick to point out that his anthropometric data are drawn from studies of wheelchair occupants, most of whom have substantial use of their upper bodies. As a consequence the mean and standard deviation measurement information cannot be readily applied to the general population of wheelchair bound disabled people.

The purpose of the following discussion is to point out the need for disability responsive design, refined design which takes into account the different physical capabilities of severely disabled people (and particularly those who have limited use of their upper bodies). Attention to such design refinements often makes the difference between an ehvironment which can sustain independent living and one which will not.

The American Institute of Architects - Research Committee recently completed a post occupancy study of Creative Living, Inc., eighteen units of newly constructed housing built at a cost of $300,000 (estimated at $34/sq. ft.). The findings of the evaluation poignantly suggest that failure to deal with refined design considerations produces environments which reduce independence in daily living activities for (in this instance) quadriplegic residents. Among the post occupancy study recommendations proposed to "fine tune" the Creative Living residential units were the following:

1. Raising the height of the kitchen table and living room desk or adapting them so that they could be set at different heights.
2. Raising the refrigerator one or two feet off the floor, putting a handle on the door, putting lazy susans on the shelves inside, and designing a device for lifting food out of the refrigerator.
3. Replacing the unit front door locking devices (traditional key and lock) with ones that residents can operate independently.
4. Replacing toggle light switches with the pressure sensitive plate type, moving up thermostats, changing drape controls to one manipulable by residents.
5. Changing window locking devices to one manipulable by residents.
6. Providing longer hoses on portable shower heads that will reach from shower to sink so residents can have their hair washed, replacing faucet handles on bathroom sinks with a model that has a longer lever.
7. Replacing or adapting handles on kitchen stoves to eliminate the need to pinch or squeeze the controls in order to adjust the stove.
8. Changing to microwave ovens with easy to use controls.

Even a cursory review of this partial list of suggested modifications indicates the importance of initial careful attention to disability responsive design. Clearly, in this case, construction of accessible housing has not produced an independent living environment inasmuch as most environmental controls are not within the reach or the manipulable capability of the residents.

Small motor coordination problems of the severely physically disabled fall into one or more of the following categories with the lack or diminution of:

1. grasping ability
2. steadiness or balance
3. feeling sensation
4. lifting or lateral movement ability
5. reaching ability
6. left or right side body functioning (resulting in biased orientation)

Depending on the nature of a specific disability some or all of these problems will be significant. In many instances the loss or impairment of one or another function will alter the use of, or tax, other functions (e.g., poor grasp and lack of feeling sensation may be moderated by visual control which in turn will limit the extent of reaching ability--only those objects within eye sight can be controlled). It should also be recognized that the degree of any given incapacity may vary through the day (e.g., as a function of fatique) or with the state of the disease (e.g., with increasingly debilitating disabilities like multiple sclerosis).

What all of this suggests is that: (1) wheelchair oriented anthropometric data of the type presented by Goldsmith must be taken only as provisional, and (2) rehabilitation type check lists (illustrated, Table 1) may provide useful categorical information for the designer, but such information should always be checked empirically against the capabilities of the individual being designed for. Even within gross categories there are likely to be significant differences which will influence individual functioning. Interviews with Atlantis Community members turned up the following ability discrepancy within one such categroy. One individual, a C-5 quadriplegic, was found to have sufficient sensation and grasp in her right arm so that the use of a hand brace would be irritating and not essential. A second individual, also a C-5 quadriplegic, lacked any sensation in her right arm, but did have some grasp ability. This woman, therefore, had been fitted with a hand brace. As a consequence the first person, lacking sufficient grasp without a hand brace could not pick up a telephone from the floor, whereas the second (and presumably more disabled) person could lift her telephone form the floor with a reacher.

European countries (Great Britain and Sweden in particular), because of their longer experience with efforts to facilitate independent living for the severely disabled person, have already begun to compile systematic design information of the type referred to here. This is evident in publications of the Fokus Society in Göteborg and the Disabled Living Foundation in London. However, such information, tailored to American specifications and manufactured items, is as yet not widely available. It is for this reason that Atlantis considers the development of an experimental kitchen as an essential first step in the rationalization of the design of housing for severely physically disabled persons.

NEW CONSTRUCTION AND REHABILITATION

Existing Housing: Modification Priorities

Much existing housing is already unintentionally accessible, or almost accessible. When possible, already accessible housing should be selected. This avoids the cost of revisions directed solely at altering access. Ramping a single outside step or a slightly raised exterior door sill of a house situated on a flat site is obviously less costly than dealing with a raised porch, an exterior flight of stairs, or a hilly site. Money saved on such access modifications can be well spent on other more essential alterations.

TABLE I

Potential ADL Function at Intact Cervical Cord Levels

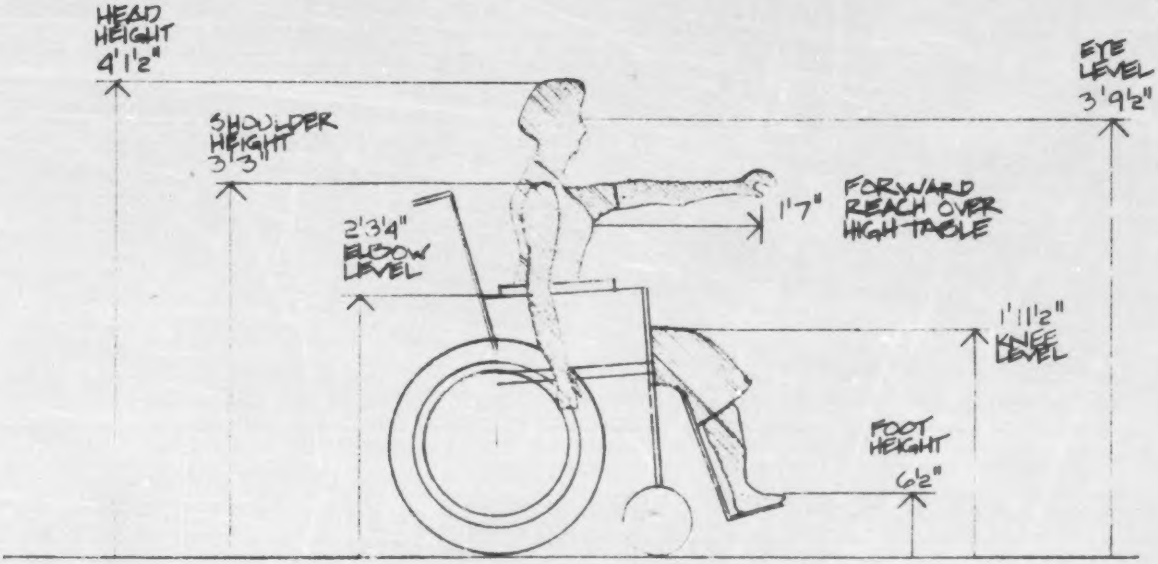
Activity	4	5	5-6*	6	8-1
Sleep					
Bed					
Sit up in bed	0	0	0	I	I
Positioning	0	0	P With Bed Rail	I	I
Travel					
Transfers					
Bed	0	0	0	I	I
Toilet	0	0	0	P With Seat	I
Car	0	0	0	P With Board (Optional)	
Utilities					
Handwriting	0	P	I	I	I
Electric Typing	0	0	P-B	P	I
Dress					
Dressing					
Upper Extremities	0	0	P-B	I	I
Lower Extremities	0	0	0	I	I
Closures	0	0	I	I	I
Eat					
Eating	0	P	I	I	I
Neatness					
Personal Hygiene					
Teeth-Brush	0	P	P	I	I
Hair-Comb (Male)	0	P	P	I	I
Shave	0	P	P	I	I
Make up (Female)	0	P	P	I	I
Wash Hands & Face	0	P-A	P-B	I	I
Toilet Activities					
Bowel	0	0	0	P	I
Bladder	0	0	0	P	I
Bathing	0	0	P	I	I
Transportation					
Wheelchair Independence					
Indoors	0	P-A	P-B	I	I
Outdoor & Irreg. Sure	0	0 P Electric	P-A	I	I

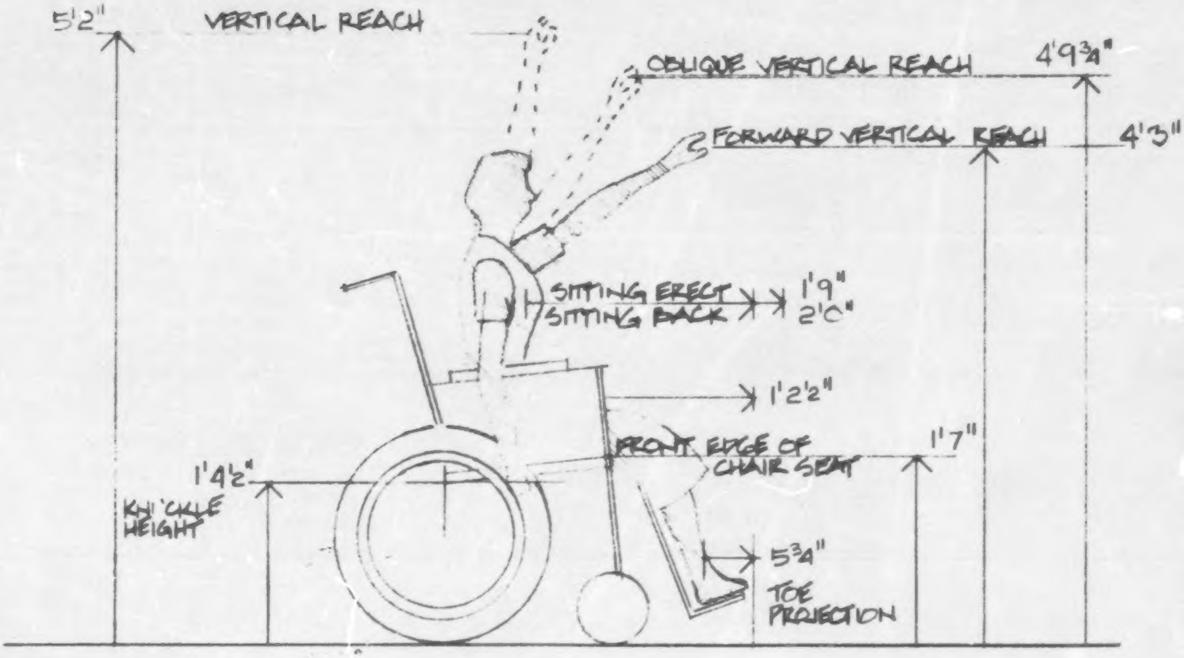
Activity	4	5	5-6*	6	8-1
Driving					
Transfers	0	0	0	P Board Optional	I
Actual-Drive	0	0	0	P Hand Controls	I Hand Controls

KEY:

I - Completely Independent
P - Independent with device,
adaptations or aide assistance
0 - Unable to perform
* - C5 level - one upper; C6 level - on other side

A - With maximum difficulty
B - With minimum difficulty
Note - C5 quadriplegic does
activities with maximum help


HEAD HEIGHT 4'1½"
SHOULDER HEIGHT 3'3"
2'3¼" ELBOW LEVEL
1'7" FORWARD REACH OVER HIGH TABLE
EYE LEVEL 3'9½"
1'11½" KNEE LEVEL
FOOT HEIGHT 6½"


5'2" VERTICAL REACH
OBLIQUE VERTICAL REACH 4'9¾"
FORWARD VERTICAL REACH 4'3"
SITTING ERECT 1'9"
SITTING BACK 2'0"
1'2½"
FRONT EDGE OF CHAIR SEAT 1'7"
1'4½" KNUCKLE HEIGHT
5¾" TOE PROJECTION

ANTHROPOMETRICS

VALUES ARE MEAN VALUES

SOURCE: GOLDSMITH

Typically bathroom doors are narrower than other interior doors. Often room doors are a minimum of 30" (2'6") with a clear opening of 28", whereas bathroom doors are likely to be 28" (2'4") with a clear opening of 26", or even narrower. An adequate hallway width is generally considered to be 36" (3'0"). A typical bathroom door of 26" clear opening off of such a hallway cannot be negotiated by a wheelchair. Accordingly, a major priority would be to alter the doorway to provide for a minimum clear opening of 30". First, however, the occupants' requirements for the use of the bathroom should be determined. Where bathroom use is expected to occur only with attendant assistance, it might be cheaper to use a narrower (non-motorized) wheelchair specifically for bathroom use thereby avoiding the expense involved in modifying the door opening. The money thus saved could then be applied to installing a roll-in shower for wheelchairs.

Our experience has shown that light switches placed at a normal height do not usually pose an insurmountable access problem, however, electrical outlets placed near the floor do. An inexpensive method of modifying the electrical outlet placement is to use mini-extension cords which leaves the existing outlets intact. Light switches can be altered inexpensively to accomodate pressure sensitive plates.

Plumbing controls in accessible bathrooms and at the kitchen sink should be altered to accomodate thermostatic control and lever operation as well as to incorporate a flexible hose with a non-splash spigot.

Kitchen sink access can generally be provided for, inexpensively and with minimal damage to the existing cabinetry, by simply removing the under the counter cabinet doors and by removing the false floor. If the kitchen drain plumbing is not simultaneously altered the existing drain piping should be insulated to protect the wheelchair occupants' knees.

Because the accessibility of storage space is generally limited to the space between 1' 6" and 3' 7" above the floor, it always presents a problem. Further, the increased importance of having objects stored near where they are used (resulting in the spreading out of storage) often presents a logistical problem. Wall mounted adjustable storage shelving is one obvious solution. Probably a less expensive and more flexible solution is to use furniture for storage purposes (e.g., tables, magazine racks, chests of drawers, etc.).

It is preferable to have the residents' life style dictate the need and priorities for change, and then to make the alteration. It is impractical to make extensive modifications in anticipation of the residents' future expectations. It is not uncommon for an individual to want to demonstrate an ability, only later to discover that the activity in the long run is not worth the effort. Extensive modification to accomodate an intention is too expensive if engagement in the activity turns out to be only temporary.

New Construction: Kitchen and Bathroom Checklists

In our estimation the kitchen and the bathroom require the most careful attention in the case of new construction. The attached checklists indicate the generally preferred conditions to be met in the design of these amenities. The checklists were prepared after consulting several sources of information concerning design for the disabled. Some information was derived from sources detailing minimum standards which have been written into law (e.g., Chasin/Saltman, Schweikert, McCullough/Farnham). Most of the carefully researched design information has come from European sources (e.g., Brattgärd, Goldsmith, Walter). The checklists represent a compromise among these various sources in an effort to minimize cost while at the same time insuring adequate (as opposed to lavish) design.

Where gross dimensional discrepancies occur among the various sources, the range of acceptable dimensions is presented. All of the authors are in agreement that design for specific individuals is preferable to design for a category of persons. And, all acknowledge that design standards are based more on wheelchair requirements than upon the requirements of their occupants. In this sense the checklists, insofar as they represent a summary of design recommendations, should be taken as a general guide--a guide to keep the designer out of serious trouble. If basic room dimensions are met, individualized layout of amenities can often be made to suit the particular requirements of a specific occupant.

Kitchen Checklist

General Layout

1. An uninterrupted work sequence depends on the placement of the stove, oven, sink and refrigerator. The preferred arrangement is to have the sink between the stove and the refrigerator. Countertop workspace should be located on either side of the sink and stove and adjacent to the refrigerator (Goldsmith).
2. Typically, kitchens are laid out according to one of three floor plans: the U-shape, the L-shape or the corridor (Chasin/Saltman). Authorities do not agree on the relative merits of these arrangements as they apply to kitchen layouts for wheelchair bound users. One reference consulted preferred either the U-shape or the L-shape to the corridor kitchen on the grounds that either of these arrangements allowed for a continuous countertop workspace (Chasin/Saltman). A second source, with which we generally agree, states "The main advantage of the 'U' kitchen is its

compactness. The 'L' kitchen requires more travel distances than the other arrangements, but has the advantage of ample space within the kitchen for a table and allows for flexibility in the placement of doors. The corridor arrangement, with 5' 0" between cabinets and appliances opposite each other, presents no problems. It eliminates corners, is compact, and has short travel distances" (McCullough/Farnham).

3. Wheelchair clearance between countertop worksurfaces, in a corridor or U-shaped kitchen must be a minimum of 5' 0" (Walter), although this can be reduced to 4' 0" if cabinetry allows for adequate wheelchair toe space of 6" X 8-3/4" (Mace).

4. Provision for dining space in the kitchen is preferred (Goldsmith, Walter). Such an arrangement minimizes travel distance.

5. A wheeled trolley and/or wheelchair lap tray will accomodate movement of objects in the kitchen (Chasin/Saltman). This is especially the case where storage is separated from the countertop worksurface.

6. Adequate and diverse storage is essential because of limited accessibility for a wheelchair bound person. It must be carefully considered and planned. One possible solution is a storage wall separated from the countertop worksurface wall in a corridor kitchen arrangement. (See the attached plan, elevations, and sections for a prototype kitchen.)

7. Utensils and food should be stored as close as possible to their place of predominant or first use as is practically possible (Chasin/Saltman). Non-cabinet storage alternatives should be considered; e.g., door mounted shelves, sliding racks, rolling shelves and bins, etc. (Chasin/Saltman).

Special Features

Counter Heights and Depth

1. Typical countertop worksurface height is 2' 9" with one section 2' 0" X 2' 6" at a 2' 6-1/2" height (Mace). The preferred arrangement, especially with non-permanent multiple-occupant housing, is to have the countertop work surface adjustable to individual requirements (Walter, Fokus). The depth of the countertop work surface should not exceed 2' 0" (Mace, McCullough/Farnham).

Storage Provision

1. Maximum storage accessibility is between 1' 6" and 3' 7" from the floor (Goldsmith). Storage shelves within cabinetry should be adjustable (Mace). Adjustable cabinets are preferred (Walter, Fokus). Maximum above the counter storage depth is 12" (Walter, McCullough/Farnham), and maximum height of the lowest shelf above a counter is 16", with 12" being sufficient in most cases (Mace). Corner storage, even with a lazy susan installation, is least efficient, least accessible, and most expensive (McCullough/Farnham).

2. Under the counter storage should be avoided because of its inaccessibility. However, it if is employed cabinetry should allow for a wheelchair toes space of 6' X 8-3/4" (Mace).

Kitchen Sink

1. The sink depth should be kept to 4" or 5" to increase in the sink accessibility and to assure below the counter wheelchair clearance (Walter, Mace). The preferred maximum rim height for the sink is 2' 9" (McCullough/Farnham). The sink bowl should drain at the rear (Walter, Mace), and under the counter piping should be insulated and or covered (Chasin/Saltman,

McCullough/Farnham). A kneespace recess 2' 5" high and 2' 6" wide must be provided at the sink (Mace, Goldsmith).

2. The sink should be fitted with a wrist control tap and an aerated spigot (Walter, Mace), and possibly with a pull out spray hose (Goldsmith). Water temperature should not exceed 120° F (Mace). Location of the controls is a matter of individual requirement. Improper location can render the sink useless.

Stove and Oven

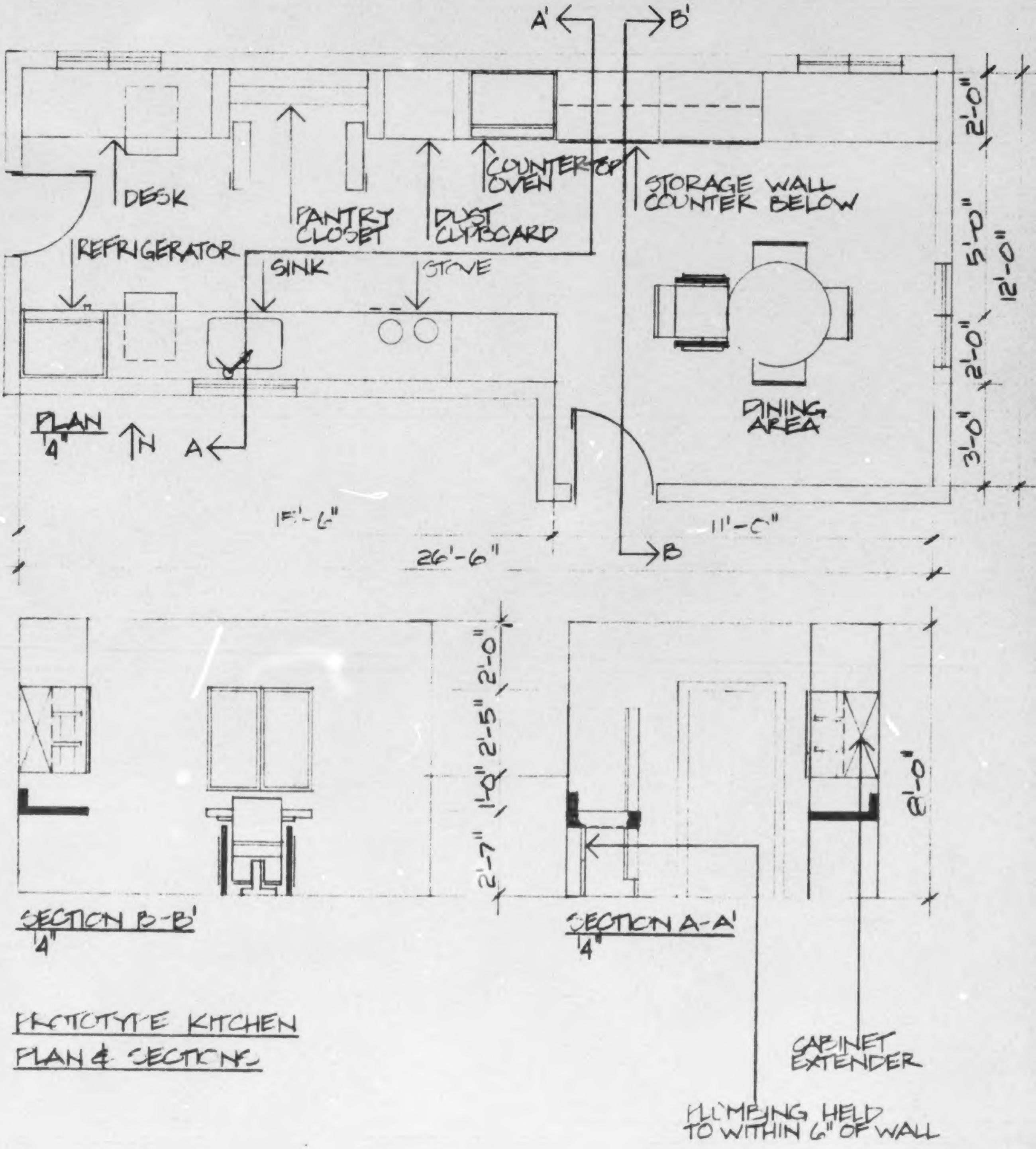
1. A countertop oven, or a built-in oven at countertop height, with side hinged doors is preferred (Walter). Often a microwave oven, or a toaster type oven appliance is a useful adjunct or alternative (Chasin/Saltman).

2. Flush mounted cooking rings in a countertop stove are preferred as these minimize the necessity for lifting cooking utensils (Walter). The rings should be placed along the front edge of the counter top with side mounted controls preferred (Walter). A minimum of 18" wide countertop worksurface should be provided on each side of the stove (Goldsmith).

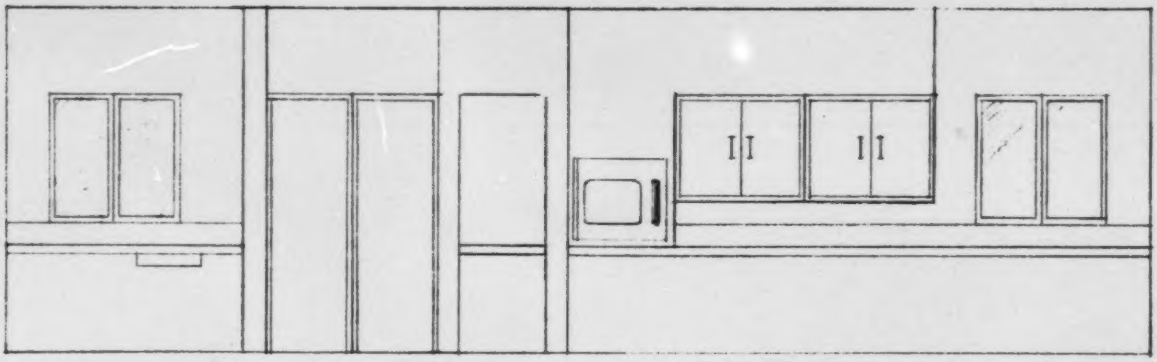
Refrigerator and Freezer

1. A countertop refrigerator is optimal although a full height standing refrigerator - freezer is generally acceptable (Walter). A side hinged door is preferred (Walter). Installation of lazy susans on existing refrigerator shelving increases accessibility.

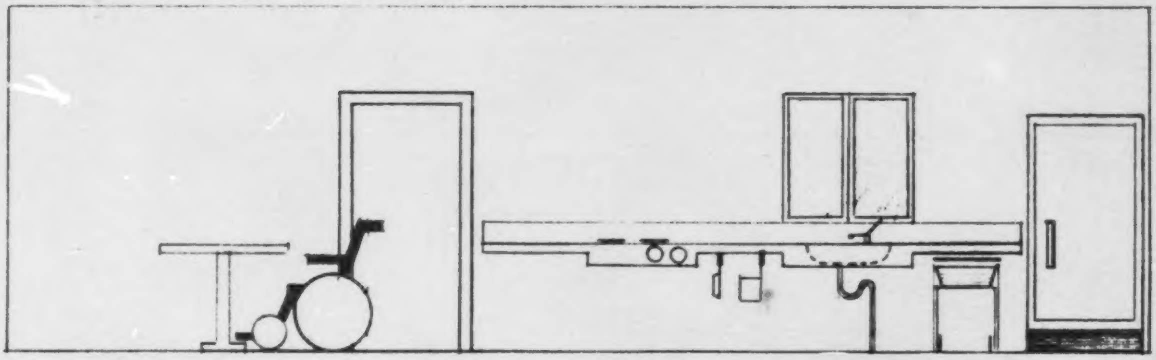
2. A side by side arrangement of refrigerator and freezer, with side hinged doors is preferred. Check door opening width for wheelchair clearance (Chasin/Saltman). An under the refrigerator freezer is inaccessible to most wheelchair bound persons (McCullough/Farnham).


A'
B'
DESK
PANTRY CLOSET
DUST CUPBOARD
COUNTERTOP OVEN
STORAGE WALL COUNTER BELOW
REFRIGERATOR
SINK
STOVE
DINING AREA
PLAN
¼"
N
A
B
2'-0"
5'-0"
2'-0"
3'-0"
12'-0"
15'-6"
26'-6"
11'-0"
2'-0"
2'-5"
1'-0"
2'-7"
8'-0"
SECTION B-B'
¼"
SECTION A-A'
¼"
CABINET EXTENDER
PLUMBING HELD TO WITHIN 6" OF WALL

PROTOTYPE KITCHEN
PLAN & SECTIONS



NORTH ELEVATION
1/4"



SOUTH ELEVATION
1/4"

PROTOTYPE KITCHEN
ELEVATIONS

Bathroom Checklist

Toilet

1. According to one source the preferred fixture is an elongated, wall hung, model with a push button flush (Schweikert). However, a second source recommends that the WC not be wall hung, and instead that it be placed on the floor not less than 6" from the wall. This enables exchange of the WC when necessary and it facilitates sideways tranfer from a wheelchair (Fodus).

2. Actual preferred location of the WC depends on the individual's disability and should be determined in each case. Such location is important with respect to preferred appraoch and transfer method, access to sink and/or needed storage, grab bar requirements, etc. (Schweikert). The greatest flexibility in approach alternatives is preferred; where possible allow for either frontal or lateral approach (Goldsmith, Walter).

3. Seat height should be between 1' 6-1/2" and 1' 8" or equal to the wheelchair seat height (Goldsmith, Mace).

4. Provide a wider than usual seat (Goldsmith). Provide an elongated seat (Schweikert).

5. A support rail at 2' 9" above the floor, capable of supporting a 250# load, and mounted no less than 1-1/2" from the wall should be provided. The rail should be 54" long and 1-1/2" in diameter (Mace). Preferred position depends upon the approach requirements of the user.

Bath vs. Shower

"Some disabled persons cannot manage a bath at all and must have a shower; others might prefer a sitz-type bath. Some might find great difficulty in getting into the bath, but benefit enormously once the effort is made. There is then the school of thought that prefers the shower within the bath because therein lies the flexibility. But this presupposes that all can get into a bath even if it is only a shower they want..." (Walter). "The severely disabled always have trouble using a bathtub. From a hygienic point of view (e.g., with bladder and intestinal disorders) bathtub bathing is not recommended. We suggest that showering is more suitable." (Fokus).

Bathtub

1. Where the user is exceptionally disabled and needs considerable help, the freestanding bathtub with one end against a wall is preferred, but it is exceedingly space consuming. Under less extreme conditions the bathtub is placed with one long and one short side against the walls (lter).

2. A transfer seat is the most useful bathtub adjunct and space should always be provided for it at the bathtub end remote from the taps. A transfer seat should be at the same height as the rim of the bathtub and have a minimum width of 18" (Walter, Goldsmith). A bathtub rim height of between 1' 6" and 1' 8" is recommended (Walter, Goldsmith).

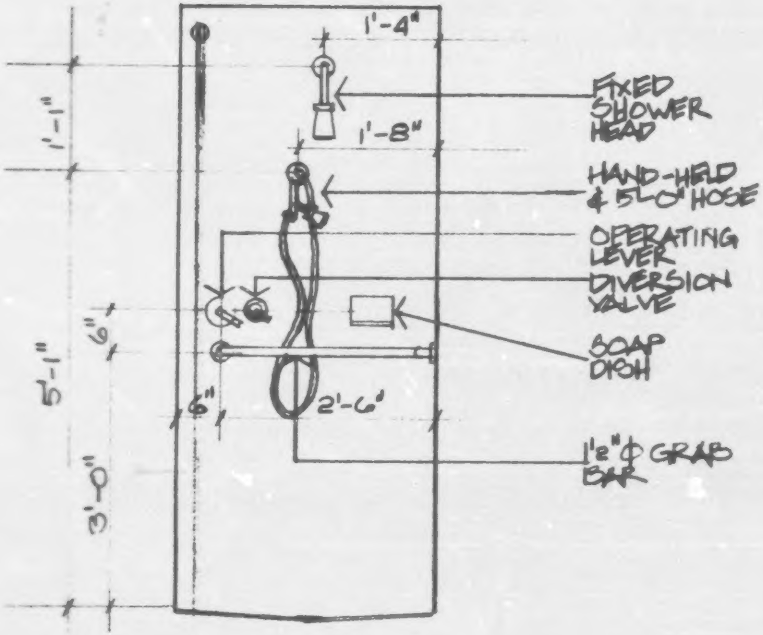
3. Grip rails must be installed along the bathtub walls (Goldsmith); however their location will depend upon the users' disability and the positioning of the bathtub (Walter). Preferred height for the grip rail is 24" above the floor and it should accomodate a load of 250# (Mace).

4. A shower-bathtub combination presents difficult transfer problems, however, a simple slide over wooden upholstered seat can be constructed to cushion the sharp shower door guide tracks (Schweikert).

Shower

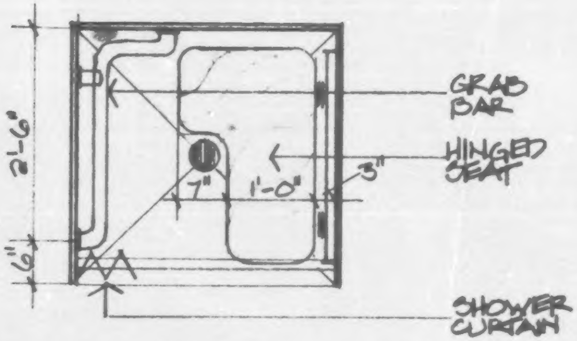
"The perfect stall shower would be one where the individual could roll right in, close the door, be able to turn the water on with a lever, be guaranteed that the water will come out of several strategically placed shower heads at a predetermined and unchangable temperature, turn off the water with the same lever, turn on another lever which would force hot, dry air through the compartment drying him and his wheelchair thoroughly, turning off the hot air with the same lever, and rolling out into the bedroom to get into clean clothes. Just like a dishwasher. But, there ain't no such thing, so we have to do with what is available to us." (Schweikert).

1. The preferred dimension for the stall shower is 5' 0" X 3' 0" (Schweikert). The minimum acceptable dimension is 3' 0" X 3' 0" (Mace).
2. The preferred arrangement is to have a wheel-in shower with a continuous floor line. One suggestion is to use waterproof, mildew-proof indoor-outdoor carpeting in the bathroom and the bedroom, presumably abutting a non-slip tiled shower floor (Schweikert). An alternative is for the bathroom to have a continuous non-slip tile floor with a floor drain in the shower area (Fokus).
3. The floor surface must be composed of non-slip material (Mace).
4. Typically a shower seat of some sort is called for. Height from the floor should be 19" (Mace), but for those suffering from stiff hips, the required seat height might be as much as 24" (Walter). A wall hinged seat or bench has the advantage that when it is not in use it leaves the shower area free for use by an ambulant disabled or able-bodied person. Corner placement saves space but requires more effort by the wheelchair user to transfer. A WC shaped ring seat aids in the ease of washing (Walter), and a long fixed bench seat projecting beyond the wet area permits the user to leave his aids at the dry end and to work


1'-4"
FIXED SHOWER HEAD
1'-8"
HAND-HELD & 5'-0" HOSE
OPERATING LEVER
DIVERSION VALVE
SOAP DISH
1½"Φ GRAB BAR
1'-1"
6"
5'-1"
6"
2'-6"
3'-0"

SHOWER WALL ELEVATION

ADAPTED FROM MACE


GRAB BAR
HINGED SEAT
2'-6"
7"
1'-0"
3"
6"
SHOWER CURTAIN

SHOWER FLOOR PLAN

ADAPTED FROM MACE

himself along to that end after showering (Walter). Also suggested is that placement of amenities (soap dish, wash cloth holder, etc.) at 40" above floor level. Such placement would accomodate the user in a seated position (Walter, Mace).

5. Install grab rails at 36" from the floor (Mace).

6. Where one shower spray only is provided, the shower head and flexible hose should be housed on a hook within easy reach and without obstructing movement (Walter). Recommended is the use of a single lever control (Mace).

7. Thermostatic control of the water is essential. "A thoroughly reliable thermostatic mixing valve is essential. It should be placed out of reach and carefully pre-set to the correct temperature. It is essential that the valve should be selected only when hot and cold water pressures are known, to ensure that it is capable of controlling prevailing pressures" (Walter).

8. Inasmuch as most disabled people feel the cold more than able-bodied people, the bathroom should always have provision for the maintenance of a comfortable room temperature. This is expecially important in the shower area (Walter).

Lavatory

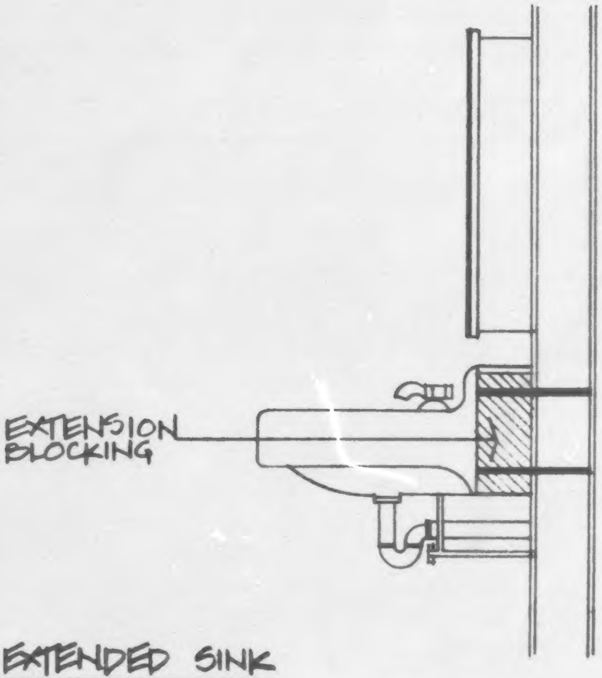
1. A variety of sink options are available: wall hung, countertop built-in, and free-standing units. With wall hung units care should be taken to insure a mounting that can withstand a 250# load, as many disabled people will use the sink to steady themselves or for balance (Schweikert, Mace). With countertop built-in and free-standing units, a minimum of 29" vertical clearance and 36" wide knee space under the sink is required for wheelchair accessibility (Mace).

2. Sink rim heights above the floor of between 32" and 34" are variously recommended (Schweikert, Mace, Goldsmith).

3. The front edge of the sink must be an adequate distance from the back wall to accomodate projecting wheelchair footrests and the users feet (Walter). This can be accomplished with an extender panel between a wall hung sink and the wall (Schweikert). With a countertop built-in sink it can be accomplished by placing the sink bowl toward the front edge of the counter.

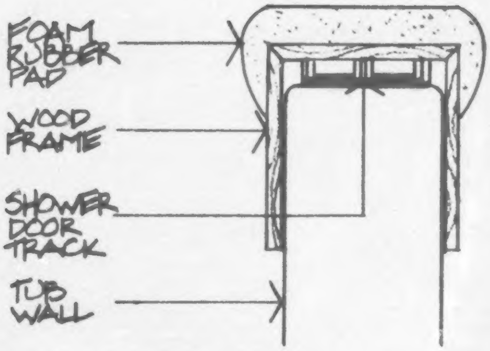
4. All sink drains should be located toward the back of the basin, the basin depth should be 4" or 5" (This requires specification of a handicapped sink). Piping below should be held as close to the wall as is practicable and the piping should be boxed in or insulated (Schweikert, Goldsmith, Mace).

5. Sink fixtures (valve controls and spout) should accomodate the individual requirements of the user both in type and placement.


EXTENSION
BLOCKING

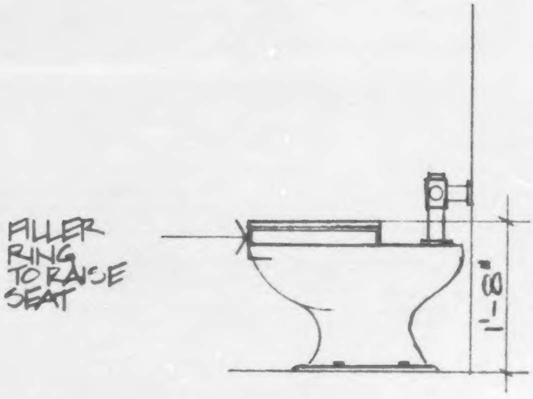
EXTENDED SINK

ADAPTED FROM SCHWEIKERT


FOAM
RUBBER
PAD
WOOD
FRAME
SHOWER
DOOR
TRACK
TUB
WALL

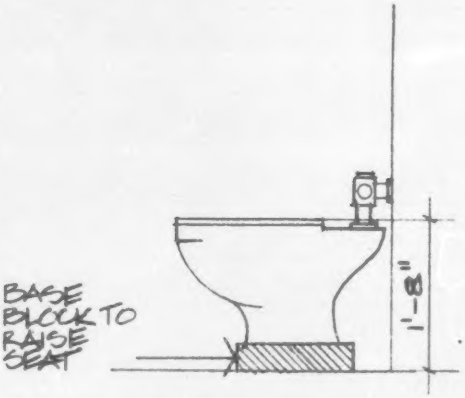
TUB EDGE SEAT

ADAPTED FROM SCHWEIKERT


FILLER
RING
TO RAISE
SEAT
1'-8"

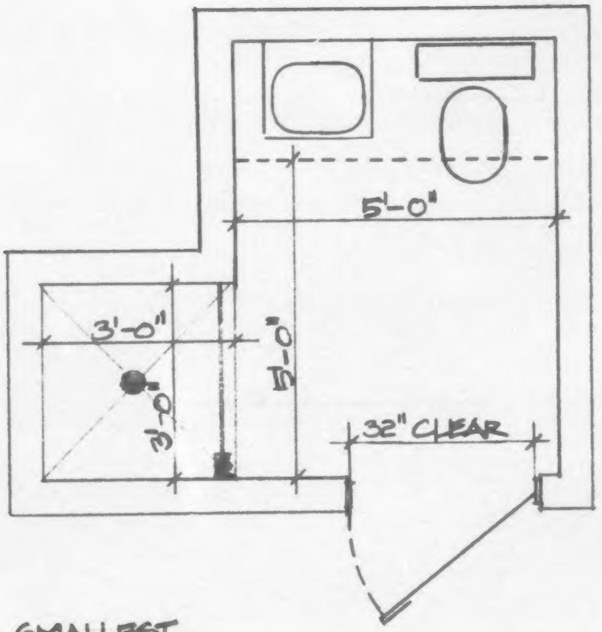
RAISED TOILET SEAT
FILLER RING

ADAPTED FROM SCHWEIKERT


BASE
BLOCK TO
RAISE
SEAT
1'-8"

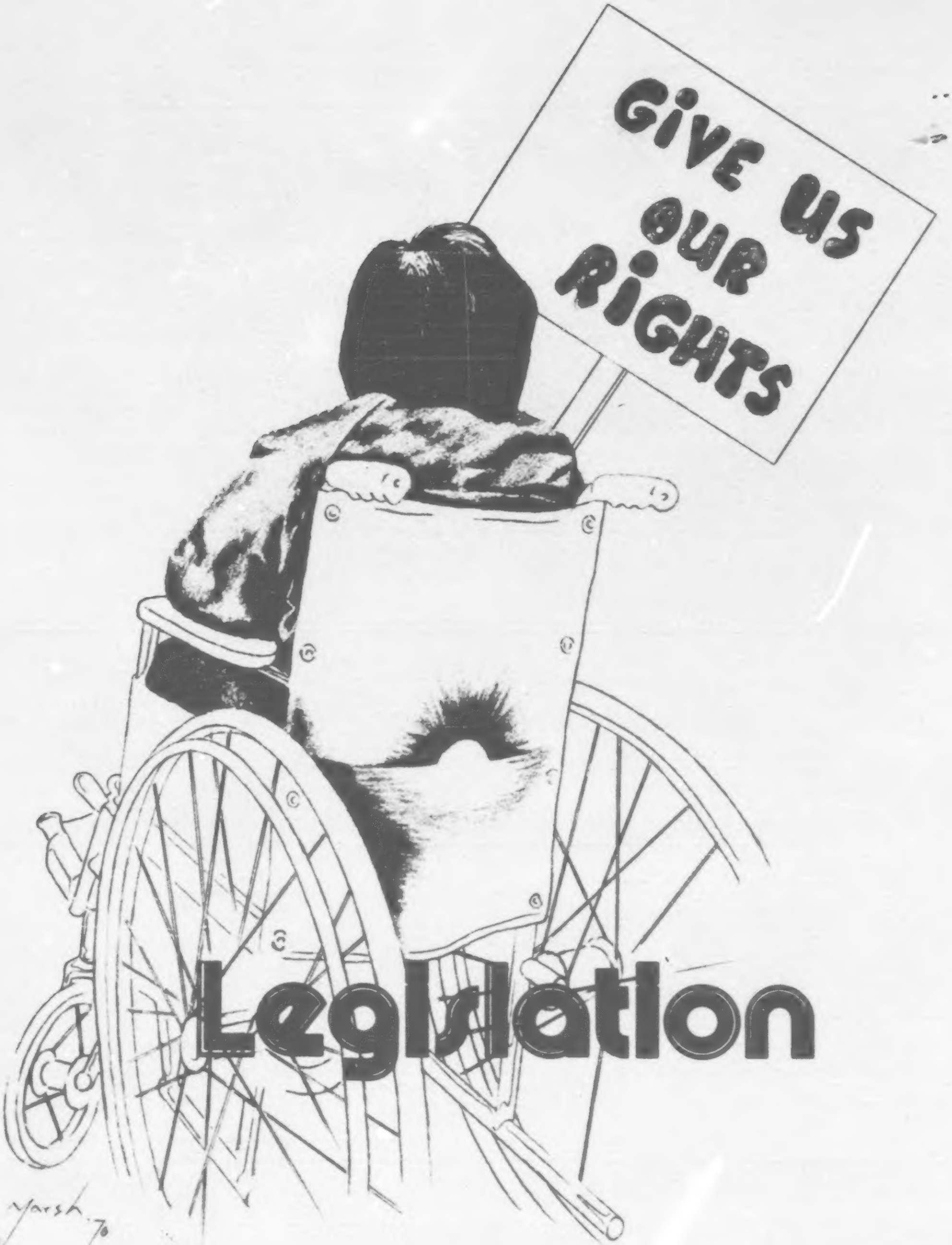
RAISED TOILET SEAT
BASE BLOCK

ADAPTED FROM SCHWEIKERT


5'-0"
3'-0"
3'-0"
5'-0"
32" CLEAR

SMALLEST POSSIBLE BATHROOM

ADAPTED FROM MACE


GIVE US OUR RIGHTS
Marsh '70

Legislation

Chapter Eleven Legislation

"There are lots of things you need to learn right away when a disability sets in."

INTRODUCTION

There is very little legislation in Colorado concerning the disabled in general and the severely physically disabled in particular. Furthermore, it is not realistic to think that the disabled will get effective legislation passed without having government officials sensitized to the disabled's problems. For the most part, legislators are not even aware of the problems the disabled face or where the problems originate. The problems are the result, not only of a lack of legislation, but also of many administrative and policy decisions. Legislation alone is not enough, there needs to be enforcement of the laws and a sensitive administration to go along with it.

In the past eight months, during the second regular session fo the Fiftieth Colorado General Assembly, there were many committee hearings, including hearings by the H.E.W.I. (Health, Environment, Welfare and Institutions) Subcommittee Yet, no bills dealing with the physically disabled were actually introduced during that session. Several bills concerned with the aged and developmentally disabled were introduced. It was necessary to specifically add the physically disabled to the target population of the developmentally disabled bill.

A 1975 amendment to the Colorado Revised Statutes of "Buildings Constructed by Public Funds-Standards", effective July 1, 1976 sets new standards of accessibility for public buildings. The responsibility for enforcing these standards lies with the Office of State Planning and Budgeting when state funds are being utilized, and by the local building department or its equivalent of the political subdivision having jurisdiction.

Another revision, which extends the scope to private dwellings, was passed in 1975 by the Colorado legislature under H.B. 1125, which also amends the above-mentioned "Buildings Constructed by Public Funds-Standards". In this amendment, provisions are made for any private construction of multi-dwelling units to make one unit for every seven accessible to persons in wheelchairs. This law also went into effect July 1, 1976, and would not affect any plans started before July 1, 1975.

Unfortunately, this legislation does not define the word "accessible" and leaves the definition to the discretion of the local counties. Consequently, it is not surprising that this legislation has had little impact on housing opportunities for the disabled.

There is a definite need for a lobbyist for the physically disabled population of Denver and Colorado. A lobbyist would be most effective in informing the legislators of the problems and needs of the disabled.

LEGISLATION IN OTHER STATES

A survey of legislation in other states shows that Florida has passed several bills per session that aid the disabled. Florida is also very accessible, architecturally. The irony here is that there is no provision for the disabled person to remain in his own independent living situation without being independently wealthy. Therefore, even in Florida most disabled persons are forced to live in nursing homes. Florida has Standards of Accessibility that apply to all public buildings and laws prohibiting discrimination in housing and employment.

All the following bills were passed in 1974 in the state of Florida:

1. A bill prohibitive discrimination in auto insurance rates, prohibiting

policy cancellation or policy renewal refusal due to one's physical handicap.

2. A bill requiring the Department of Health and Rehabilitative Services to advise the family of the disabled person within 15 days of eligibility rights and services available under the state.

3. A bill providing that wheelchair-confined individuals shall be eligible for license plate with an "HP" code stamped on the plate. The bill sets forth parking privileges including free parking areas.

4. A bill giving the disabled/handicapped person an additional $5,000.00 homestead tax exemption.

In 1976, a bill was passed prohibiting disability insurers from refusing to provide or charging discriminatory rates for disability coverage for a person solely because he or she is mentally or physically handicapped.

1. A bill making prosthetic and orthopedic appliances exempt from Sales and Use Taxes. This bill defines prosthetic and orthopedic appliances as any apparatus or device used to replace or substitute for any missing part of the body, to alleviate the malfunction of any part of the body, or to assist any disabled person in leading a normal life by facilitating such a person's mobility.

2. A bill prohibiting health insurers from refusing to provide, or chargins discriminatory rates for disability coverage for a person solely because he/she is mentally or physically handicapped.

The legislature in Illinois introduced and passed some interesting bills. S.B. 1476 creates an interagency committee on handicapped employees and also provides for the establishment of an "affirmative action program" for the employment of handicapped persons by each agency of the executive branch under the governor. Such plans shall include a current detailed status report indicating the number, type, percentage and approximate salary of handicapped individuals employed in the department, agency, board or commission. The plan shall also include a description of the extent to which, and methods whereby, the special needs of the handicapped employees are being met. H.B. 1387 raised from 21 to 25 years the maximum age of handicapped children whose transportation to and from school must be paid by their school district. Many other states provide for payment of transportation, but it is usually paid through an allocation made by the state rather than by the individual school districts.

In Massachusetts and South Carolina, the codes for the construction of public buildings includes a provision for five percent of twenty or more rental units to be accessible to the handicapped.

ANTI-DISCRIMINATION LAWS

Twenty-seven states have anti-discrimination laws that include the disabled. Colorado is not one of them.

Iowa has a Civil Rights Act that has been in effect since 1965, which is quite a bit simpler than H.B. 1173 that was introduced in Colorado in 1975. Some legislators feel H.B. 1173 failed because it was too cluttered, and they plan to work on a Civil Rights bill for the disabled in the next session. Kentucky passed a bill in 1976 that is similar to a civil rights bill, but it was called the 1976 Equal Opportunity Act (It is a very positive document, and should be considered a model for such legislation).

The closest Colorado has come to a Civil Rights bill is the 1963 "Blind and Other Handicapped Persons - Civil Rights." This legislative intent provides for:

1. "Physically disabled to participate fully in the social and economic life of the state and to engage in remunerative employment."

2. "Physically disabled shall be employed in the state service, the service of the political subdivisions of the state, the public schools, and in all other employment supported in whole or in part by public funds on the same terms and conditions as the able-bodied, unless it is shown that the particular disability prevents the performance of the work involved."

3. "Physically disabled have the same rights as the able-bodied to the full and free use of the highways, streets, sidewalks, public building, public facilities, and other public places."

4. "Physically disabled are entitled to full and equal accomodations advantages, facilities, and privileges of all common carriers, airplanes, motor vehicles, railroads, motor buses, street cars, boats, or any other public conveyances or modes of transportation, hotels, motels, lodging places, places of public accommodations, amusement, or resort, and other places to which the general public is invited, including restaurants and grocery stores.

FEDERAL LEGISLATION

The key piece of Federal Legislation that recognized the category of severely disabled people and the fact that they had needs beyond vocational skills was Public Law 93-112, known as the "Rehabilitation Act of 1973".

The bill attempted to define 'severely disabled' so that individuals who did not have the potential to return to work could benefit from rehabilitation services in order to "live independently". After much discussion about a House definition and a Senate definition, a compromise was reached and the following definition adopted for the bill:

"The term 'severe handicap' means the disability which requires multiple services over an extended period of time and results from amputation, blindness, cancer, cerebral palsy, cystic fibrosis, deafness, heart disease, hemiplegia, mental retardation, mental illness, multiple sclerosis, muscular dystrophy, neurological disorders (including stroke and epilepsy), paraplegia, quadriplegia and other spinal cord conditions, renal failure, respiratory or pulmonary disfunction, and any other disability specified by the Secretary in regulations he shall prescribe."

In order to identify the population and the needs of this category of severely disabled, the bill mandated a special study: "The Secretary shall conduct a comprehensive study, including research and demonstration projects of the feasibility of methods designed (1) to prepare individuals with the most severe handicaps for entry into programs under this Act who would not otherwise be eligible to enter such programs due to the severity of their handicaps, and (2) to assist individuals with the most severe handicaps who due to the severity of their handicaps or other factors such as their age, cannot reasonably be expected to be rehabilitated for employment but for whom a program of rehabilitation could improve their ability to live independently or function normally within their family and community".. This study was carried out by the Urban Institute of Washington D.C. and is known as the Report of the Comprehensive Service Needs Study, which is quoted extensively in this report.

The Rehabilitation Act of 1973 went on to make provison for a wide variety of programs for the disabled, of which we'll cite here only the most relevant to the scope of our report. Any person seriously interested in the issues should get a copy of this important bill (Public Law 93-112, 93rd Congress, H.R. 8070 September 26, 1973).

Regarding employment, the bill established an "Interagency Committee on Handicapped Employees" to: "...provide a focus for federal and other employment of handicapped individuals, and to review, on a periodic basis, in cooperation with the Civil Service Commission, the adequacy of hiring, placement, and advancement practices with respect to handicapped individuals, by each department, agency and instrumentality in the executive branch of the government, and to ensure that the special needs of such individuals are being met". Also, all executive agencies were asked to prepare and submit to the committee an affirmative action program plan for the hiring, placement, and advancement of handicapped individuals.

An "Architectural and Transportation Barriers Compliance Board" was established, composed of the heads of major executive department and agencies such as HEW, Transportation, HUD, Labor, Interior, GSA, Postal Service, VA and having the following functions: (1) to insure compliance with existing standards and (2) to investigate and examine alternative approaches to the architectural, transportation and attitudinal barriers confronting handicapped individuals, particularly with respect to public buildings and monuments, parks and parkland, public transportation (air, water and surface) and residential and institutional housing.

The Board was also mandated to examine transportation barriers that impede the mobility of the disabled, and also see that the housing needs of disabled individuals are met.

An important provision is related to employment, which is a central concern of all disabled who want to lead a constructive life. The Act stated specifically that: ..."any contract in excess of $2500.00 entered into by and federal department or agency for the procurement of personal property and nonpersonal services (including construction) for the United States shall contain a provision requiring that, in employing persons to carry out such contract the party contracting with the United States shall take affirmative action to employ and advance in employment qualified handicapped individuals...".

Finally, a "Non-discrimination under Federal Grant" clause prohibited that a disabled individual be discriminated against under any program receiving federal assistance.

The Rehabilitation Act of 1973 was received with great hope by the disabled individuals across the land. What has happened since then? Have the aims and promises of the Act been fulfilled?

First of all, the program is alive and well. In March 1976, the "Rehabilitation Extension Act of 1976" became Public Law 94-230. This new law extended the existing Act for two years without making any changes except amounts appropriated. This would give the various programs initiated under the 1973 Act sufficient continuity to permit proper evaluation.

The major problem has been the definition of the term "severely handicapped". The confusion was particularly troublesome for the Vocational Rehabilitation agencies throughout the country who are mandated to give severely handicapped individuals priority by law. Goal setting was another problem, because the original Act did not set any specific quotas about how many severely disabled were to be served. This has become the basis for a brand new "numbers games".

The key problem, however, seems to be that the rate of implementation and enforcement of all these wonderful sections of the Act has been slow and timid. As a result, practical results have not sufficiently percolated to the individual disabled at the grassroots level. The discussions in the chapters of this report on employment, housing, and transportation, clearly show that implementation of the congressional mandate lags far behind. As the Journal of Rehabilitation concluded in its review of the Act (July-August, 1976): ..."The 1973 Amendments in many respects can best be characterized as a bill of rights for the disabled: (including) affirmative action, non-discrimination, architectural barriers, and participation (by the disabled) in the development of program plans. As of May 1976, no regulations have been issued regarding non-discrimination provisions or affirmative action programs... The real issue involved in all these provisions is the capacity of the federal government to enforce its own laws. If voluntary action could achieve this goal, the law would not have been required in the first place. Enforcement is necessary when voluntary compliance is not achieved. The question now is: what is the overall strategy for implementation of the law, and when will it be put into effect?" A lot of disabled are impatiently awaiting the answer to this question.

There is some additional federal legislation of interest to the disabled community. In the area of education, there is Public Law 94-142, "Education for all Handicapped Children Act of 1975," which amends P.L. 91-230, "Education of the Handicapped Act" to provide educational assistance to all handicapped children. The act states, "To the maximum extent appropriate, handicapped children, including children in public or private institutions or other care facilities, will be educated with children who are not handicapped."

There has been controversy recently about HUD Section 8 Rent Subsidy being counted as income by the Social Security Administration, Supplemental Security Income (SSI) Division. This problem was solved by passage of Senate Bill 3295, which states specifically: "An assistance payment made with respect to a dwelling unit under this Act may not be considered as income or a resource for the purposes of determining the eligibility or the extent of eligibility of any person living in such unit for assistance under the Social Security Act or any other federal law." This bill is now Public Law 94-375.

Senate Bill 662, introduced February 11, 1975, amends the Urban Mass Transportation Act of 1964, which provides for mass transportation assistance to meet the needs of elderly and handicapped persons. It states that elderly and handicapped persons have the same right as other persons to utilize mass transportation facilities and services; that special effort shall be made in the design, planning, construction, and operation of mass transportation facilities and services, so that the availability to elderly and handicapped persons of mass transportation, which they can effectively utilize, will be assured; all federal programs offering assistance for mass transportation (including the programs under this Act) should implement this policy.

House Resolution 6691 was introduced on May 6, 1975, to amend Title XIX of the Social Security Act. This bill would provide that any individual who is unable to care for his/her personal needs (dressing, bathing, getting in and out of bed, etc.) without assistance would be eligible as a disabled person (even though employable) for the services of a home health aide under the applicable state plan approved under such title.

Several other bills have been introduced:

A progressive bill is House Resolution 297 which would amend Title XVI of the Social Security Act to increase Supplemental Security Income (SSI) benefits to $200.00 a month for individuals and $275.00 a month for couples. This bill was referred to House Committee on Ways and Means, Sub-Committee on Public Assistance.

House Resolution 173 would make certain that recipients of aid or assistance under the various federal-state public assistance and other aid programs will not have the amount of such aid or assistance reduced because of increases in monthly social security benefits. This bill was referred to the House Committee on Ways and Means, Sub-Committee on Public Assistance.

Senate Bill 103 would provide for reimbursement of extraordinary transportation expenses incurred by certain disabled individuals in the production of their income. This may only apply to disabled who are Vocational Rehabilitation clients; it is not clear from the way it is worded. This bill was referred to the House Committee on Labor and Public Welfare.

LEGISLATION FOR THE COLORADO HOME CARE ALLOWANCE

Chapter three has explaned in detail the economic importance of the home care allowance for the severely disabled person. The chapter also highlighted the fact that this allowance has gone up only $17.00 in the last fifteen years. Part of the reason lies in the complex interplay between the legislature and the executive agencies of the state. The legislature, specifically the Joint Budget Committee, reviews and reacts to the formal budget request of the Department of Social Services. If there is to be a change in the homecare allowance, the Social Services Department must propose it in their budget request. The Department of Social Services is reluctant to propose the raise in allowance becuase they feel that the mandate for the increase should come from the legislature first. The Atlantis planning group has attempted to make contact with all the parties involved, in the hope that an increase in the homecare allowance could be achieved in the next legislative session. The staff of the Joint Budget Committee feels that if the case for the higher allowance can be presented convincingly, the chances for passage look good.

The Atlantis planning staff also met with the Income Maintenance division of the Department of Social Services, and they too expressed sympathy with the proposed increase, and promised to include an additional appropriation request to the Joint Budget Committee for the next fiscal year. The Atlantis planning staff also submitted to the Social Services administrators detailed data and recommendations to support the validity of the proposed increase. It is hoped that in this way the legislative and executive branches of the state government will get together on this issue and do what is necessary to bring the homecare allowance up to the level at which it should be.

A comparison of assistance payments made by other states, including the amount of state supplement (if any) and homecare or equivalent is appended to this report. The only state far surpassing Colorado is California.

HOMECARE ALLOWANCE IN OTHER STATES

STATE	STATE SUPPLEMENT TO SSI	HOME CARE
California	Max. $276-296/mo	Chore Services; Homemakers $548/mo
6nnecticut	No information	Homemakers Service
Florida	Amount Varies	None
Georgia	Amount Varies	None
Illinois	Amount Varies	Chore Services; Homemakers
Iowa	None	In Home Health Care:$351.50/mo
Kansas	None	Purchase of Service Program
Louisiana	None	Homemaker Service
Maine	$10 avg. ($195/mo)	None
Maryland	Amount Varies	Essential Person $148/mo
Michigan	Max. $192.10/mo	Adult Chorse Services-$270/mo
Minnesota	Amount Vaires	Live-in attendant
Missouri	Amount Varies	Homemakers; Title 20
Nebraska	Amount Varies	Director Vendor Payment;Title 20
New Hampshire	Max. $192/mo	Chore Services;Homemakers;Title 20
New Jersey	$22.20 ($190/mo)	Chore Services
New Mexico	None	None
New York	$60.85 ($228.65/mo)	Homemakers Service
North Carolina	None	Chore Services:Max. $200/mo
North Dakota	None	None
Oklahoma	$32 ($190/mo)	Non Technical Medical Care:$6.37/da
Oregon	$3.20 ($180/mo)	Homemakers;Title 20
Pennsulvania	$32.40 ($200.20/mo)	Domiciliary Care Program

STATE	STATE SUPPLEMENT TO SSI	HOME CARE
Rhode Island	$31.44 ($199.24/mo)	Homemakers Service:Max. 30 hr/wk @ $2/hr
Texas	None	Chore Services; Homemakers
Utah	None	Homemakers Service
Vermont	$32.20 ($200/mo)	Personal Service:1=$125, 2=$175
Virginia	Amount Varies	Chore Services; Homemakers
Washington	$34.10 ($201.90/mo)	Chore Services; Title 20
West Virginia	None	Chore Services:Max. $110/mo
Wyoming	None	Chore Services

Chapter Twelve Agencies

One portion of the planning effort was to survey those public and private agencies in the Metro area that provide services for the disabled. By selection from a comprehensive directory, we contacted only those agencies whowe wouldexpect to serve the "severely disabled." Some agencies failed to return the questionnaires, others replied to a telephone prompting several months later. Some still did not appear anxious to respond; they often querried the interviewer's authority or need to obtain specific data, such as the number of persons served by the agency and, of that number, how many might be considered severely disabled.

Upon reviewing the completed surveys, we found that, often, the data was insufficient for our needs. Due to inadequate or inflated statistics and varing definitions of "disabled" or "handicapped," we were repeatedly unable to determine the number of clients conforming to our interpretation of that term.

In general, the private agency is helpful to its constituency (which is almost always a specifically limited one) and oftentimes also sponsors community service programs for public education. Public agency constituencies are much broader and thus receive far less individualized assistance.

Both types of agencies inadequately attack the basic problems of the disabled, such as transportation, housing and income. Atlantis believes there is a need for an integrated, non-competitive, coalition of agencies to pool their strength and to help solve these basic problems.

To conduct an in depth and comprehensive study of the agencies was beyond the scope of our effort. The following agencies are listed alphabetically, with address, and telephone number. A sample questionnaire follows the list of agencies. The completed questionnaires are on file with Atlantis.

PUBLIC AGENCIES

Boettcher School	1900 Downing Street Denver 80218	222-7997
Colorado Division of Employment and Training	1210 Sherman Denver 80203	893-2400
Colorado Division of Rehabilitation	1575 Sherman Denver 80203	892-2285
Colorado Rehabilitation Association	1575 Sherman 5th Floor Denver 80203	892-2652
Commission on the Disabled	619 South Broadway Denver 80209	297-3056
Denver Manpower Administration	1037 20th Street Denver 80202	892-7131
Denver Opportunity	431 Grant Denver 80203	297-5128
Handicapped Children's Program	Colorado Dept. of Health 4210 East 11th Denver 80220	388-6111 ext. 329
Jefferson County Housing Department	1801 19th Street Golden 80401	278-3283
John F. Kennedy Child Development Center	University of Colorado Medical Center 4200 East 9th Avenue Denver 80262	394-7224
Legal Aid Society of Metropolitan Denver, Inc.	912 Broadway Denver 80203	837-1313
Regional Transportation District	1325 South Colorado Blvd. Denver 80210	759-1000
State Home and Training School Grand Junction	P.O. Box 2568 2800 D Road Grand Junction 81501	245-2100
State Home and Training School Pueblo	1330 West 17th Street Pueblo 81003	543-1185

State Home and Training School Wheat Ridge	10285 Ridge Road Wheat Ridge 80033	424-7791
University of Colorado at Denver Office of Services for Disabled Students	1100 14th Street Denver 80202	629-2861
Westside Neighborhood Health Center	990 Federal Blvd. Denver 80204	292-9690

PRIVATE AGENCIES

Bal Swan Children's Center	13th at Cottonwood Broomfield 80020	466-6308
Cerebral Palsy Center	2727 Columbine Denver 80205	355-7337
Children's Hospital	East 19th Avenue & Downing Denver 80218	861-8888
Colorado Epilepsy Association	1835 Gaylord Street Denver 80206	321-3266
Colorado Heart Association	4521 East Virginia Denver 80222	399-2131
Colorado Spina Bifida and Hydrocephalus Association	6603 E. Bates Avenue Denver 80224	756-5329
Craig Hospital	3425 South Clarkson Englewood 80110	761-3040
Denver Board for the Mentally Retarded and Seriously Handicapped	639 South Broadway Denver 80209	744-2781
Easter Seal Society for Crippled Children and Adults of Colorado, Inc.	609 West Littleton Blvd. Littleton 80120	759-2016
Four Corners Sheltered Workshops, Inc.	3121 Main Avenue Durango 81301 (home office)	247-0277
Goodwill Industries	3003 Arapahoe Denver 80205	629-1990

Kidney Foundation of the Rocky Mountain Region, Inc.	2186 South Holly Denver 80222	758-4887
March of Dimes	1330 Leyden Denver 80220	321-8801
Mountain States Chapter National Paraplegic Foundation	P.O. Box 19036 Denver 80010	343-4760
Muscular Dystrophy Association	105 Filmore, #205 Denver 80206	321-1016
Multiple Sclerosis Society of Colorado	1390 Logan Denver 80203	832-3728
Multiple Sclerosis National Society	7290 Samuel Drive Denver 80221	427-6713
Rocky Mountain Chapter of the Arthritis Foundation	70 West Sixth Avenue Denver 80223	623-5191
Utility Workshop of Denver Jewish Family & Children's Service	1212 Delaware Denver 80223	6230251

AGENCY SURVEY

Name of Agency____

Address____________________ Phone________________

Date Established_______________

Area(s) served____

____

Total number of persons served________________________

Services____

____

____

____

Goals and objectives (brief)______________________________

____

____

____

Source(s) of funding____________________________________

____

Total amount of funds received________________

Name or title of governing body____________________________

What are your future projections for serving or not serving the severely disabled?

____

____

____

What problems (funding, accessibility, transportation, etc.) do you have in serving the severely disabled?____________________________________

____

____

Chapter Thirteen Surveys

Atlantis contracted with Social Change System, Inc. to conduct two surveys concerning the disabled population of Denver. The Market Survey was to determine the number of disabled persons in our target population residing in Denver and the Metropolitan area. The Needs Assessment was designed to document disabled views and feelings in a wide spectrum of areas affecting independent living.

The Market Survey proved to be a problem practically from the beginning. Overlapping definitions of what "disabled" means as well as incomplete records and data created a monumental task of searching and extrapolating. The Needs Assessment on the other hand, was immensely rewarding and satisfying to conduct. The range of people interviewed and their concern serves as sound documentation for the recommendations in this document. A summary of the Needs Assessment and a copy of the survey instrument are included in the appendix.

Social
Change
Systems
Inc.

ESTIMATES OF THE INCIDENCE OF SEVERE PHYSICAL DISABILITIES AMONG THE METROPOLITAN DENVER POPULATION

Prepared for
Atlantis Community, Inc.

Revised
December 7, 1976

1459 Ogden
at Colfax
Denver
Colorado
80218

a non-profit corporation for social research, education, and action programs (303) 832-3526

AIM

The aim of this section of the research for the Atlantis Community has been to determine the number of severely physically disabled persons in the City and County of Denver as well as in the metropolitan area. The collection of such information was seen as necessary by Atlantis so the organization could have a statistical basis for program planning. The information was also to be used in formulating a sample of potential respondents for the later needs assessment interviews.

PROCEDURE

We began the task with the belief that some one or some few agencies, whether public or private, would have the desired information. With the participation of Atlantis staff members, we designed a form on which to record the pertinent information, and then proceeded to make contact with various agencies. It quickly became obvious to us that not only did no one agency or organization have the information we needed, but that no combination of sources could yield the data.

Actually, the problems we encountered in trying to determine the incidence of severe physical disabilities were more complex than that. In the first place, different agencies and organizations used different definitions. The U.S. Census Bureau, for example, uses the broadest definition, namely, any physical condition that limits the amount or kind of work a person can do. Atlantis, on the other hand, wanted to know the incidence of persons who are either bed-bound, wheelchair-bound, or in need of an attendant. (The population to which the Atlantis Community wishes to address itself are persons between 12 and 60 who are either bed-bound, wheelchair-bound, or in need of an attendant to help them with the activities of daily living.) Second, different bases were used to arrive at some of the figures we obtained. While one source might be estimating a national prevalence rate, another might use as their bases, the number of people who have applied for a certain program. Third, some sources had only incomplete data, such as a source which was able to tell us the number of persons they treated who were developmentally disabled and had Cerebral Palsy, but not the numbers with other forms of physical disability. Fourth, some potential sources could not or would not cooperate. At least one source made promises of data and then strung us out for months until we finally gave up trying to obtain it. Finally, some of the sources had outdated information, or more accurately, information which we would suspect is outdated.

PRESENTATION OF DATA

What follows then is the compilation of the best data that we could find about the incidence of severe physical disabilities among the Denver population. Some of the counts are based upon extrapolations of national level data. Those national-level will be presented first then, to give the reader an idea of where our data are from and to form a context for understanding the local-level data.

National-Level Data

Persons Disabled. Included in the 1970 U.S. Census were three questions concerning physical disabilities. The questions were oriented strictly toward disabilities preventing the respondent from working, or limiting the kind or amount of work which could be done. No questions were asked about the type of disability, its cause, length of disability, or severity. Out of 112,289,642 persons (aged 18-64 and not inmates or not attending school), 12,090,770 or 10.8% were disabled. Of those, 4.4% (4,930,709) were completely disabled and 6.4% (7,160,061) were partially disabled. For central cities of metropolitan areas, the incidence of disability was somewhat higher, 11.25%.

Incidence of Various Disabilities. In the spring of 1976, the National Information Bureau (a national non-profit organization which serves as consultants to philanthropic groups) issued a report with what they called "guess-estimates of disease or handicap prevalence." The following table contains the prevalence of the condition per 100,000 and then the total cases for that condition.

Disease/Handicap	Guess-estimate prevalence per 100,000	Guess-estimate total cases
Rheumatoid Arthritis	2380	5,000,000
Cerebral Palsy	330	700,000
Multiple Sclerosis	240	500,000
Muscular Dystrophy	95	200,000
Myastenia Gravis	45	100,000

Persons Paralyzed. In 1971, the Public Health Service conducted a national health survey of 44,000 households containing 134,000 persons, total - persons not institutionalized and not in the military. Information was sought about the incidence of 24 selected impairments. The PHS concluded that for persons aged 17-44, the prevalence of paralysis (complete or partial) was 6.9/1,000. For complete paralysis, the figure was 3.6/1,000 for all ages, and 3.0/1,000 for partial paralysis.

Of the 4.6 per 1,000 aged 17-44, 1.7 were limited or totally unable to carry on their major activity (work, school, or housekeeping), while for the older group, 5.7 or 10.7 were similarly affected. Overall, 3.5 of the 6.9 paralyzed persons, or one-half were limited in the kind or amount of majority activities they could carry on or were completely unable to carry on those activities.

Users of Special Aids. The Public Health Service national survey of 1969 gathered data from 134,000 persons in 42,000 households (non-institutionalized civilians), in an effort to determine the incidence of use of special aids, such as wheelchairs, orthopedic shoes, braces, etc. The prevalence of wheelchair use was 2.1 persons per 1,000. Of those, 49.9% reported using the chair all the time, 18.8% most of the time, and 28.9% occasionally. Almost 41% had been using a chair for five years or longer.

Metropolitan and Denver Data

A first set of figures at the metropolitan and city level can be derived from various national prevalence rates cited above. Looking at the prevalence of the five selected disabilities, as extrapolated from the national to the local levels, we would get the following figures.

Disease/Handicap	Metro Denver Extrapolation	Denver Extrapolation
Rheumatoid Arthritis	29,155	12,257
Cerebral Palsy	4,043	1,700
Multiple Sclerosis	2,940	1,236
Muscular Dystrophy	1,164	489
Myastenia Gravis	551	232
TOTALS	37,853	15,914

Utilizing the national figures from the 1971 Public Health Survice survey on numbers of persons paralyzed, we can derive the following figures for this area.

Disability & Age Group	Metro Denver Extrapolation	Denver Extrapolation
Paralysis, all ages	7,979	3,448
Complete paralysis, all ages	4,165	1,800
Partial paralysis, all ages	3,471	1,483
Paralysis, ages 17-44	2,331	849
Paralysis, ages 45-64	2,283	1,100

These above figures reflect not only the national prevalence rates but also the central city vs suburban rates. In addition, the figures for complete paralysis: 0.4 persons per 1,000 have paralysis of other sites than the extremities, and those have not been analyzed here.

Extrapolating the 1969 national health survey on users of special aids, we see that in the metro Denver area, the prevalence of wheelchair use would be as follows:

Age Group	Metro Denver	Denver
15 - 44	546	211
45 - 64	515	243

Persons Receiving Care in Homes for Aged and Dependent. The 1970 U.S. Census recorded figures for persons in homes for the aged and dependent. It is known that in addition to geriatric patients, such homes do have physically disabled persons. The Census, however, has only a crude breakdown of these figures. In 1970, the Denver metro area had 6059 persons in homes for the aged and dependent, with 1124 of them between 15 and 64. The county-by-county breakdown (for which an age breakdown was not available) is as follows:

Denver	2621
Jefferson	1417
Arapahoe	963
Adams	674
Boulder	384
TOTAL	6059

Persons Receiving Care in Homes and Schools for Physically Disabled. Also included in the 1970 U.S. Census were data about persons in schools and homes for the physically disabled. Again, the breakdowns were not very extensive. In 1970, the metro area had 156 such persons, including 29 blind persons. Of that 156, 74 were 14 years or older, and all 156 were within the City and County of Denver.

Persons Disabled. The first analysis presented in this report is based upon 1970 U.S. Census data about persons unable to work due to physical disabilities. We were able to obtain more precise (Fourth Count") data from this question for the Denver area. The data that follow, then, are for persons, aged 16-64, not inmates and not attending school, i.e. those otherwise eligible for the work force.

	Denver	Suburbs	Total Metro
In labor force			
Disabled, employed	14,567	19,461	34,028
Disabled, unemployed	1,541	1,329	2,870
Not in labor force			
Able to work	4,268	5,009	9,277
Unable to work			
Less than 6 months	791	608	1,399
More than 6 months	9,648	7,296	16,944
Total disabled (16-64)	30,815	33,703	64,518
Total population (16-64)	273,531	362,942	636,473
Per cent disabled	11.27	9.29	10.14

These data show that the Denver metro area has relatively fewer disabled than the national proportion, due mainly to the much small incidence of disability in the Denver area suburbs. The proportion of disabled persons in Denver proper is right at the national level for central cities (11.27% in Denver, 11.25% nationally).

Persons Receiving Vocational Rehabilitation. One of the most recently compiled sets of data we were able to obtain came from the state's Division of Rehabilitation. These data, however, contained no breakdowns by age. The period of service covered is from July 1, 1975 to May 31, 1976.

Disability	Denver	Suburbs	Total Metro
Paraplegia, Quadraplegia, & Other Spinal Cord Conditions	76	111	187
Amputations & Orthopedic Conditions	845	1,591	2,436
TOTALS	921	1,702	2,623

Persons Receiving SSI/Colorado SSI. At our request, Mr. Royal Edgington of the Denver Department of Social Services prepared some estimates of the incidence of severe physical disabilities among Denver recipients of SSI and Colorado SSI. He utilized a 25% sample of 3316 persons, 1048 were disabled in a way fitting the Atlantis definition, including 196 who were wheelchair-bound, 96 who were bed-bound, and 756 who needed an attendant. Other demographic characteristics of this group are shown in the following table.

	Bed-bound		Wheelchair-bound		Needing Attendant		Totals	
	M	F	M	F	M	F	M	F
Under 20	0	0	0	0	4	0	4	0
20 - 29	4	16	12	20	88	60	104	96
30 - 49	4	8	12	28	96	108	112	144
50 +	16	48	16	108	140	260	172	416
Subtotals	24	72	40	156	328	428	392	656
Totals	96		196		756		1048	

CONCLUSIONS

In this section, we shall attempt to pull together all the figures presented above and make sense of them in order to arrive at the best possible estimate of the incidence of severe physical disabilities among the Denver and metropolitan area populations. Some of the statistical operations performed on the available data may be somewhat questionable, and a few of those steps should be articulated at this time.

First, we have attempted to derive separate figures for the City and County of Denver and for the suburban area (Adams, Arapahoe, Boulder, and Jefferson Counties). Second, we have tried to focus our analysis on the 16 or 17 to 64 age range since most figures were available for that age group. Third, we have built in a growth factor to reflect the population growth from 1970 to 1976. Some of the data were from the 1969 - 1971 period, while other were from 1976 data. The earlier data were corrected by adding 1.02% for the Denver figures and 43.4% for the suburban ones. The reader will quickly see that we had no choice but to make the assumption that the disabled grew at the same rate as the overall population. Fourth, we took a figure from one source about the severity of disabilities and applied it to figures for all disabilities from another source in order to estimate the numbers of most severely disabled in that second source figure. How valid such a statistical operation is, we cannot possibly say, but it does seem reasonable.

We shall now take the reader through the steps we performed on the raw data. We started with the data from the State Division of Rehabilitation, which showed that 921 Denverites and 1702 suburbanites with amuptations, orthopedic conditions, paraplegia, quadraplegia, and other spinal cord injuries (hereafter referred to as AOPQ) were being served in the July 1975-May 1976 period. Those figures constitute one estimate then, 921 and 1702.

A second estimate starts with the 4th count 1970 U.S. Census data. We see here that 10439 people in Denver and 7904 in the suburbs who were disabled were unable to work and not in the labor force. We make the assumption that those groups would constitute the most severely disabled persons of all those enumerated in the table at the top of the previous page. Since those two figures (10439 and 7904) would include all types of disabilities, we had to delimit those figures in some way to come closer to the Atlantis definition. Since persons with AOPQ conditions being served by the state's Division of Rehabilitation comprised 20.4% of all Denver residents served by the division and 31.7% of all suburban residents served by the division, we multiplied the 10439 and 7904 by those percentages. A second multiplication was performed on the remaining figures to take into account the 1970-1976 growth rate. The figures thus produced were 2172 for Denver and 3594 for the suburban area, giving us our second estimate.

Our third approach to obtaining an estimate started with the 1971 Public Health Service survey figures on the incidence of paralysis: For 17-44 year olds, the incidence of paralysis which totally or severely limits one's major activity was 1.7 per 1000. For the 45-64 year olds, the rate was 5.7 per 1000. Each figure was then corrected to take into account the city versus suburban rates, based on the national averages. The figures thus generated were: 17-44 year old city dwellers, 306; 45-64 year old city dwellers, 615; 17-44 year old suburbanites, 534; and 45-64 year old suburbanites, 661. The city total thus was 921, while the suburban figures stood at 1195. When updated to reflect the 1970-1976 growth rate, these become our third set of estimates; 939 for Denver and 1709 for the suburban counties.

A fourth method used to arrive at an estimate was based upon the National Information Bureau's 1976 estimates of the prevalence of selected physical disabilities (cerebral palsy, multiple sclerosis, muscular dystrophy, rheumatoid arthritis, and myastenia gravis) throughout the nation. The extrapolated city figure of 15,914 such persons was multiplied by 53.1% (the proportion of the city population aged 16-64), while the suburban figure of 21,939 was multiplied by 67.6% (the proportion of the suburban populated aged 16-64). Since these figures gave us no differentiation between the more severely physically disabled and the less disabled, we multiplied each figure by 50.7%, which is the percentage of those paralyzed who are severely or totally limited in their major activity (per the Public Health Survey). Those statistical manipulations then yield our fourth set of estimates of 4284 severely physically disabled persons in Denver and 7519 in the suburban areas.

Fifth, the figure from the Denver Department of Social Services can be taken just as it appears above since it takes into account the Atlantis definition of severity, the institutionalized as well as non-institutionalized population, and represents an up-to-date figure. However, that particular source could not generate a parallel estimate for the suburban counties. Still, we do get another Denver estimate then of 1048 severely physically disabled persons.

Sixth, in an effort to determine some estimates of the institutionalized population which is severely physically disabled, we started with 1970 United States Census data which recorded 1124 persons, aged 15-64 in nursing homes in the Denver metropolitan area. Since Denver in 1970 contained 42.3% of the metro area's 15-64 age population, we divided the 1124 figure that way, giving Denver 475 institutionalized persons of that age group and the suburban areas 649. When each figure is updated to 1976 levels, we get estimates of 485 persons in Denver and 931 in the suburbs who are in institutions.

Since the second and third estimates (above) are based on data for only the noninstitutionalized population, this last set of figures should be added to those other estimates. We then get the following sets of estimates.

	Denver*	Suburbs*	Qualifying Comments
1.	921	1702	Only Voc Rehab clients; age range unknown
2.	2657	4525	Based on broad definition; ages 16-64
3.	1424	2640	Only paralysis; ages 17-65
4.	1048	N/A	Based on Atlantis definitions throughout
5.	4284	7519	Only selected disabilities; estimated for ages 16-64

Our own impression, and the impression of Atlantis staffers, is that the last set of figures is unreasonably high: the National Information Bureau's estimate of the prevalence of cerebral palsy (330 per 100,000) is 3.7 times greater than the prevalence shown on the Public Health Survey (90 per 100,000). Thus, we feel comfortable in eliminating that last set of estimates, and saying then, that the estimates of severely physically disabled persons for Denver and the suburbs are 900-2700 and 1700-4600, respectively.

*Denver plus Suburbs equals the Metro Area.

Social
Change
Systems
Inc.

A NEEDS ASSESSMENT SURVEY OF SEVERELY PHYSICALLY DISABLED ADULTS IN THE DENVER METROPOLITAN AREA

Conducted for
Atlantis Community, Inc.

November 29, 1976

1459 Ogden
at Colfax
Denver
Colorado
80218

a non-profit corporation for social research, education, and action programs (303) 832-3526

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APPENDIX A: Interview Schedule

INTRODUCTION

The aim of the research project described in this report is fairly simple: to determine the daily needs of persons, living in the metropolitan Denver area, who are severely physically disabled. The client, The Atlantis Community, Inc., is a non-profit organization devoted to maximizing the independence of the severely physically disabled. The organization currently operates transitional residential facilities, for persons trying to achieve an independent living status after having lived in nursing home facilities. Atlantis also has a research and planning arm, Atlantis Planning, which has been operating with funds obtained through Denver's Community Development Administration. The charge of Atlantis Planning has been to carry on "the planning necessary to provide adequate facilities and services for the severely handicapped which will allow them to pursue an independent life style not available in the traditional institutional setting." This needs assessment survey, together with an earlier report entitled Estimates of the Incidence of Severe Physical Disabilities Among the Metropolitan Denver Population, are integral parts of fulfilling that charge.

METHODOLOGY

Questionnnaire Construction

Consistent with the philosophy of both the consultant and the client, the process of constructing the research instrument was a democratic one. Preliminary group discussions between the consultant and Atlantis staff were held to identify broad areas of concern and then more specific questions. A few questionnaires of a similar type were also consulted. As discussion led to a draft, another round of discussion would follow. The final instrument represents the fifth draft. The next-to-the-last draft was pre-tested with four or five persons before being revised.

The Sample

The research started under the assumption that obtaining lists of disabled persons would be an easy task; the assumption was proven totally incorrect. Thus, we turned to the best (i.e. longest) list we could find, a list from the Denver Commission on the Disabled of persons who had either called about or attended a series of local conferences leading up to the statewide and then White House Conference on Handicapped Individuals. Other sources of names were the Atlantis staff and calls received in response to posters displayed in facilities used by the disabled and to public service announcements through the broadcast media.

The precise group to which The Atlantis Community wishes to address itself - persons aged 12-60 who are either bed-bound, wheelchair-bound, or in need of an attendant to help with activities of daily living - made it difficult to locate the number of respondents we sought. The original thinking was to have 50-100 persons in the sample. Locating 60 appropriate persons was a chore. In addition, we wanted to have a cross-section of persons with regard to demographic and residential (independent vs nursing home) characteristics. Though we have no way of knowing exactly how well our sample reflects the disabled population of the Denver metropolitan area, we do have reason to suspect that it is more outgoing and perhaps more aware politically than those disabled we did not reach.

The Interview

The interviews, conducted in a face-to-face manner, were carried out during the period of mid-August to mid-October, 1976, with the largest majority occuring during the month of September. Although five different persons participated as interviewers, about three-quarters of them were done by one person, a woman in her thirties, who is an experienced interviewer and in addition has worked extensively with the disabled.

Respondents were called, having been randomly selected from our lists, and the purpose of the interview explained to them. Appointments were then set up with the willing parties, at their homes when convenient to them. At the time of the actual interview, the study was again explained to the respondent, and he or she was offered a summary copy of the findings if it was desired. (Forty-eight persons indicated such an interest.) Any questions they had about the study were first answered before the interview began. Interviews lasted anywhere from an hour and fifteen minutes to over four hours, though the average was around two hours.

Analysis of the Data

Once the interviews were conducted, coding began in order to translate everything into numerical categories for electronic data processing. The analyses performed included simple tabulations (frequency distributions) and chi squares (cross-tabulations of two variables at a time). The SPSS (Statistical Package for the Social Sciences) program was utilized. The data cards are in the consultant's possession and available for further analyses.

Presentation of Findings

The research findings are presented in very much the same sequence as the questions appeared on the questionnaire, with deviations from that order only for purposes of clarity and smoother flow. This should ease the task of reading the report, especially if one does so with a copy of the questionnaire at hand. Appendix A contains the interview schedule or questionnaire.

The usual standard employed in the social sciences for determining which results are statistically significant is .05 or .10, meaning that such data could not be obtained by chance more than five times or ten times in 100 chances. In many cases, we have interesting findings which fail to reach that level (e.g. .14, .20, etc.); they are presented anyway to suggest to the reader some plausible lines of thinking about the data. But not too much stock can be placed in any statement of cross-tabulation which is followed by a significance level (in a parenthesis after a statement) above .10.

FINDINGS

Profile of Respondents

The sample for the Needs Assessment survey numbered sixty persons, of whom 32 (or 53%) were males, while 28 (or 47%) were females. The largest age group represented in the sample was the 30-49 year olds, who made up 41.7% of the sample. The table below gives a fuller age and sex distribution.

	Males	Females	Totals
Under 20	3	1	4 (6.7%)
20 - 29	13	7	20 (33.3%)
30 - 49	12	13	25 (41.7%)
50 +	4	7	11 (18.3%)
Totals	32	28	60 (100%)

In terms of racial or ethnic breakdown, the non-Anglo group was so small (7 persons) that meaningful statistical analyses could not be performed using that characteristic.

Almost half of the sample (27 or 45%) were single, compared to a somewhat smaller group of married persons (23 or 38%). The other ten respondents were either separated, divorced, or widowed.

The sample was heavily weighted toward persons living in private residences, as such persons numbered 49 or 82% of the sample, compared to the 11 persons who were residents of nursing homes. Of the larger group, 19 owned their own homes, 20 were renters, and 10 lived with parents or other relatives.

In addition to the 11 respondents presently institutionalized, 13 other persons, representing 22%, had been previously institutionalized at some time, with nine of those institutionalized for periods in excess of one year. Overall, 40% of the respondents had spent some time in an institution.

In addition to the above profile, our data show that those disabled since birth are less likely to have ever been institutionalized , when compared to those with disabilities acquired later in life (significance level = .001), that those currently using attendants are more likely to have been institutionalized in the past (.12), and that as the age of onset of the disability goes up, the likelihood of ever having been institutionalized goes down (.08).

Respondents were placed into one of three categories according to their type of disability: 14 or 23% were born with a disability, 25 or 42% had become disabled later through some non-traumatic circumstance, and 20 or one-third had been disabled through a traumatic situation, including 10 respondents who were involved in auto accidents. Among our sample, the non-traumatically disabled were the most disabled (based upon an ADL scale) and the traumatically disabled were the least disabled.

Of those respondents not congenitally disabled, 10 or 17% acquired their disability before age 13, 13 or 22% between ages 13 and 20, and 22 or 37% after age 20. This means that 29 respondents, or 48%, have been disabled more than 10 years, 12 persons (20%) between two and 10 years, and four persons or 7% less than two years. Most of the trauma-induced disabilities occured between ages 13 and 20, while most of the non-traumatic ones occured before age 13.

Thirteen respondents (22%) had moved to Denver due to their disability; in all cases, the move was made at some later date, not right after the onset of the disability. Those disabled since birth moved here in larger numbers (proportionately) than those with acquired disabilities (.04).

One classification of the severity of the disabilities was based upon the use of a personal attendant: 13 persons (22%) were not using an attendant, while 34 (57%) had a part-time one, and 9 (15%) had a full-time one.

A wide spectrum of educational achievement levels was shown among our sample, with about one-quarter of the sample having completed less than high school, another quarter having completed high school, and almost half having some college experience.

Although the sample was not intended to mirror the overall (i.e. disabled and able-bodied) population of the metropolitan area from which it was drawn, the comparisons of our sample and that larger population are startlingly close on several dimensions, as shown in the table below.

Characteristic	Metro Area	Survey Sample
Sex - males	51.3%[a]	53.3%
- females	48.7	46.7
Age - Under 20	6.4 [a]	6.7
20 - 29	27.7	33.3
30 - 49	42.8	41.7
50 +	23.0	18.3
Ethnicity - non-Anglo	15.4	11.7
Marital Status		
single	25.5[b]	45.0
married	63.5	38.3
other	11.0	16.7
Education		
less than 8th grade	7.3[c]	6.7
completed 8th grade	9.3	8.3
some high school	15.9	16.7
high school graduate	34.8	21.0[d]
some college	15.4	35.0
college graduate	17.3	13.3
high school graduate +	67.4	71.7

Briefly, the comparisons show that the survey sample is more male, more Anglo, more single, and better educated than the overall metropolitan area population.

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a = for age groups 16-59, according to the 1970 US Census

b = for those 14 and older, according to the 1970 US Census

c = for persons 25 and older, according to the 1970 US Census
d = excludes vocational school graduates

Attendant Use

As earlier mentioned, almost 3/4 of our respondents require an attendant. The traumatically-disabled use them less often than others (.01), as do those disabled between ages 13 and 20 (.03); these two groups tend to be the same people. Only one respondent needs but does not have an attendant available. Attendants are paid in various ways: 43% are family members, 45% are paid by some public program, and 11% are paid out of personal funds. It is noteworthy that most respondents earning over $600/month pay their attendants out of their own pocket.

Of the 26 non-family attendants, 9 are live-in and 17 are not.

Attendant needs vary greatly among our respondents, as the following table shows.

Extent of Attendant Need	Frequency
Getting up & retiring only	20% (of those with any need)
Getting up, retiring, meals	8
Only at meals	6
Less than 3 hrs/day (time unspecified)	31
More than 3 hrs/day (time unspecified)	10
Full-time	24

Our respondents' experiences with attendants have been mixed, with 38% reporting satisfactory experiences, 29% bad experiences, and 32% mixed ones. Women are less likely to have had good attendant experiences (.02), and the same holds true for the over 30 group (.02). Right now, 60% manage their own attendants, and this is more prevalent among women than men (.05). Probably as a result of bad experiences, 77% of those with attendants would be interested in an attendant-management course.

Medical Care

Currently, 28% of the respondents are receiving regular medical treatment for their disability, and 50% (perhaps including some of the first group) receive some form of physical therapy or other rehabilitative treatment.

For most people in the sample, medical care is paid for by a public program. The table below shows the pattern of payment of medical care.

Source of payment	Totally paid by	Partially paid by
Public program	32%	8%
Insurance/workmen's compensation	5	11
Personal funds	8	11

Out of our sample of 60 persons, fully 50 use prescription drugs, which are paid for in the following manner:

Source of payment	Totally paid by	Partially paid by
Public program	23%	4%
Insurance/workmen's compensation	2	5
Personal funds	16	9

Thirty-eight persons, representing 63%, utilize over-the-counter drugs and supplies, with 35 of them (92%) paying those costs from their own funds, bringing to mind what one respondent said about being disabled: "It's too damned expensive!" Public programs pay the costs for the other three respondents.

Respondents were asked about their satisfaction with specific aspects of medical health care that are often problematic for the disabled - eye care, foot care, and dental care. Of those responding, 73% were satisfied with their eye care, 67% with their foot care, and 62.5% with their dental care. Reasons for dissatisfaction had to do with several factors: the high cost of care (16 mentions), poor coverage by a public program (9 mentions), and not enough care available (6 mentions).

Asked about medical care in general, respondents in 70% of the case were satisfied, while 20% were dissatisfied. That latter group cited a number of reasons, none with any greater frequency than any other: lack of comprehensive care, lack of sensitive personnel, lack of home health care, and lack of physician honesty with patients. "The ideal," said one of our respondents, "is to furnish enough homecare to keep people out of institutions. This is not provided." Several respondent groups tend to be less satisfied than others (though the differences were not statistically significant): those aged 30-49, lower income groups, those in institutions, and those more informed about the medical aspects of their disability.

Special Equipment

We asked each respondent about any special equipment he or she was using, and about problems they had with it. Equipment used most often included: manual wheelchair (70%), prosthetic equipment (braces, splints, etc.) (35%), specially equipped car (27%), transfer equipment (15%), and electric wheelchair (10%). The following table shows the percentages of those who need a given piece of equipment, but do not have it, and the proportion of those who have it who have trouble with it.

Equipment	% of total who need but do not have	% of equipment-owners who have troubles with it
Manual wheelchair	0	16
Prosthetic equipment	15	5
Specially equip, car	37	6
Transfer equipment	39	18
Electric wheelchair	23	65

Respondents were asked if they had ever thought of some device or equipment that would help them, but which they believed had not been invented or manufactured yet. A total of 30 different devices was described, from 27 respondents. Of the inventions called for, many were extensions of the hand, such as improved or heavy-duty braces, devices for grasping objects tightly, or devices for picking up objects from the floor. A number of inventions were intended as substitutes for absent strength, such as transfers for entry into a tub, a winch to pull a wheelchair up steps, or something to stretch the tops of one's socks to make them easier to put on. Several ideas related to wheelchairs, such as more powerful ones, eye-controlled wheelchairs, various trays, tables, or holding compartments, and portable ramps. The singlemost mentioned idea was the sock-stretcher, requested by four persons. Four persons called for some kind of lifting/pulling/transfer devices.

A related question was whether or not the respondent had ever fashioned some home-made device to make life easier. One out of every two persons had done something like that, and a list of 28 different objects was generated. Any number of different devices for picking up objects was noted, such as tongs, bent coat hangers, curtain rods, cane handles, poles, wires, and back scratchers! Several respondents told of some sort of bathtub or shower seat they had devised. Others had constructed special chairs or tables to accomodate wheelchairs or wheelchair-transfers. One respondent put together hand controls which could be transferred from one car to another, and another uses a rope to climb up to his loft bedroom. Another had come up with a solution to the problem of putting on socks: she wore tennis sockettes which had a decorative tassle at the top, which proved easier to grab a hold of.

Education

Data presented earlier showed the distribution of educational achievement levels for the whole sample. There are some patterns about who has gone farthest and who has gone least far in school. Those disabled since birth had gone farther in school than those traumatically disabled (.001); those without attendants, i.e. the less severely disabled, had not gone as far (.14), those disabled at a later age (.10) and those more recently disabled (.05) had progressed more educationally.

Of those who attended some college, 45% were in general studies. 20% in business fields, 13% in human services, and 10% in arts and sciences.

A large majority of the respondents (68%) has had some education since the onset of their disability; eliminating the 13 disabled from birth, that still leaves 28 of 47 or 60% with post-disability education. Post-disability education was found to be most common among those disabled for a longer time (over ten years) (.02) and among those less severely disabled (.09). The post-disability education has been largely at the graduate school level.

The experiences of post-disability education have been mixed ones for our respondents: there were 41 ratings of good or excellent in terms of what was learned in the schools, and 34 ratings of fair or poor. When they rated the schools as places for the disabled to go to school, the respondents handed out 44 good or excellent ratings and 31 fair or poor ratings.

Almost one respondent in three (32%) is presently attending school. Present attendance at school was closely related to being able to drive (.04), was more prevalent among the moderately severely disabled (.15), and was most common among the younger (especially under 20) respondents (.05).

The level or kind of school attended by those now going to school ranges from high school to graduate school:

Level/Kind of School	No. Respondents
Special school	4
Regular high school	1
Vocational school	1
Junior college	7
Four-year college	4
Graduate school	2
Total	19

Vocational Rehabilitation was paying for the education of nine of those 19 students; two were funded by some other public program, and seven were using personal or family funds. Sixteen of them are using some kind of equipment or assistance: wheelchair (6), personal assistant (5), orthopedic devices (2), and other forms of help (3).

Thirty persons said they would need something else in order to be able to go to school; money figured in 23 of those responses and transportation in 14 of them.

Finally, 36 of 42 who would like to go to school would prefer attending with a mix of students or had no preference. No one said s/he would like to attend school mainly with other disabled persons.

Income and Finances

A few thorough questions were asked about the topic of income. Most severely physically disabled persons have multiple income sources: we found the average number of income sources to be 1.9 per person. The following table contains the breakdown.

Income Source	% Receiving From Source
Employment/rent/dividends	65
Social Security Disability	40
SSI/Colorado SSI	35
Homecare allowance	10
Vocational rehabilitation	5
Relative's public assist.	5
Insurance/workmen's comp.	3
Other	30

Income, as expected, was on the low side, relative to income among the area's overall population, with only two persons earning in excess of $1000 per month. Again, the table below gives the fuller distribution.

Amount per Month	Frequency (%)
$25 (Nursing home)	8
$200 or less	25
$201 - 400	22
$401 - 600	17
$601 - 1000	18
$1001 and over	3
Unreported	7

Those who are receiving higher incomes tended to be: those disabled less than ten years ago (.01), those disabled later in life (.02), and those with more formal education (.002). Despite that last finding, it was also learned that thoee with post-disability education were earning less (.04).

Despite the low income levels, just about as many said they were making it on their incomes (48%) as said they weren't making it (47%). No clear patterns emerged with regard to who did and didn't feel their income was adequate, except a non-significant trend for those who are employed to be having more difficulty making it. The over age 50 group also reported adequate incomes more often, as did those disabled after age 20 (.05).

When asked how much extra per month was needed to constitute an adequate income, about one-third said less than $100/month extra, one-third would require $101-200/month, and one-third would need more than that.

Twenty per cent of the respondents receive help in managing their finances; in most cases, the help comes from a family member (with our younger respondents) or from nursing home staff.

The questionnaire contained questions about expenditure patterns for a variety of needs. The largest portion (55%) spend nothing for medical care, and only 15% spend more than $10/month on that item. Only 25% spend more than $10/month for medicine, while only 15% spend more than that on equipment and supplies. Attendant care is more expensive, though only 23% of the sample are spending anything for it: 5% spend less than $100/month, 3%, $101-200, and 15% over $200/month. A larger number of respondents spend larger amounts on transportation: 20% spend over $50/month, 23% spend $21-50, and 33% spend up to $20/month.

Most respondents (53%) spend $100 or less each month for food . Recreation is generally a small item with only 40% spending in excess of $10/month on it. Almost half (47%) lay out less than $10/month for recreational purposes.

Rent or housepayments are generally low, with only 12% spending over $200/month on that. The largest number (33%) spend in the $101-200 range, with 20% spending even less than that. Utility expenses run $21-50 for 27% of the sample, $11-20 for 23%, and less than that for 15%. Only five persons spend over $50/month on utilities.

Employment

A total of nineteen of our respondents, representing 32%, is currently employed - 14 part-time and five full-time. There are several interesting relationships between one's employment status and certain aspects of one's disability. First, those respondents disabled via a traumatic circumstance are less likely to be employed (.08), which is surprising since they, as a group, are the least severely disabled among our sample. Second, the more recently disabled are employed less (.09), and the same holds for those disabled after age 20 (.001). Third, those congenitally disabled are more likely to be working than those with acquired disabilities (.08). Fourth, and this is most surprising, a higher percentage of those with full-time attendants are working than of those with part-time or no attendants (.08). Closely related to that finding is another: there is no statistical relationship between one's ADL scale score (a measure of disability) and one's employment situation.

Employment is also linked to education, in that the least likely people to be employed are those with less education (.09), and those without post-disability education (.001).

Finally, there is a trend for employment to decrease with age of the respondent, at least for those over age 20.

Some data were gathered about one's kind of work as well as about the kind of skills one has, and a discrepancy was found to exist between the two. The table below contains the figures that reflect that discrepancy.

Skill Area	Persons with Skills	Persons Employed in Area
Professional, technical, managerial	20	4
Sales/clerical	21	7
Crafts	4	2
Laborer	8	5
Service worker	2	0

That table also suggests that the discrepancy between skills possessed and actual employment increases with the status of the work. The data on work satisfaction reflect that discrepancy as well. Of those employed, nine are dissatisfied while eight are satisfied. The reason for dissatisfaction on the part of seven of those nine is that the kind of work they're doing is not what they would like to be doing. This kind of dissatisfaction was well expressed by one person, who said, "I always thought that I should be satisfied with any job I got. I was taught that. I don't believe it anymore." The satisfied workers mention as reasons for their satisfaction: the work does match their skills, the work is challenging, or the work gives them a chance to get out.

Chances to be discriminated against in the work world are directly related to whether or not one is working: the 20-29 age group, more of whose members work than any other age group, are also most often the victims of job discrimination. Similarly, those without post-disability education, few of whom work, are also less often discriminated against. This would lead one to conclude that those unemployed do not chalk up their unemployment to discrimination. One might be tempted to say that their unemployment is instead related to their disability, but previous data show that employment bears no relation to severity of disability.

Twenty-two persons reported being discriminated against in one way or another: being treated unfairly (7 persons), not being hired (4), being excluded from inaccessible buildings (3), lacking transportation to work (3), or other reasons (5). For ten persons, the experience of discrimination was not the first time: they had encountered discrimination before.

Work, as a part of one's life, has a number of different meanings to our respondents; some of those meanings clearly overlap. The table below shows how often different meanings were mentioned.

Meanings of Work	Mentions
Earning money & being self-supporting	27
Freedom and independence	20
Personal satisfaction	16
Something to do	15
Feeling constructive	13

There are varied responses to the question of what kind of work our respondents would like to be doing, with working with people leading the list with 18 mentions, followed by work in the business field (10), and communications (6). Significantly, only three respondents wanted to be working at their present job.

Most respondents (52%) would like to work with other people, while a minority of 10% would like to work alone; the others had no preference. Again, most (72%) have no preference about working with the disabled or the able-bodied.

Twenty-six respondents indicated they would need some kind of aid or equipment in order to work: nine would need transportation, while the others would need some combination of attendant care, wheelchairs, prosthetic equipment, or accessibility. About one-third of the group said that what they needed was not available while about 40% said they were not sure.

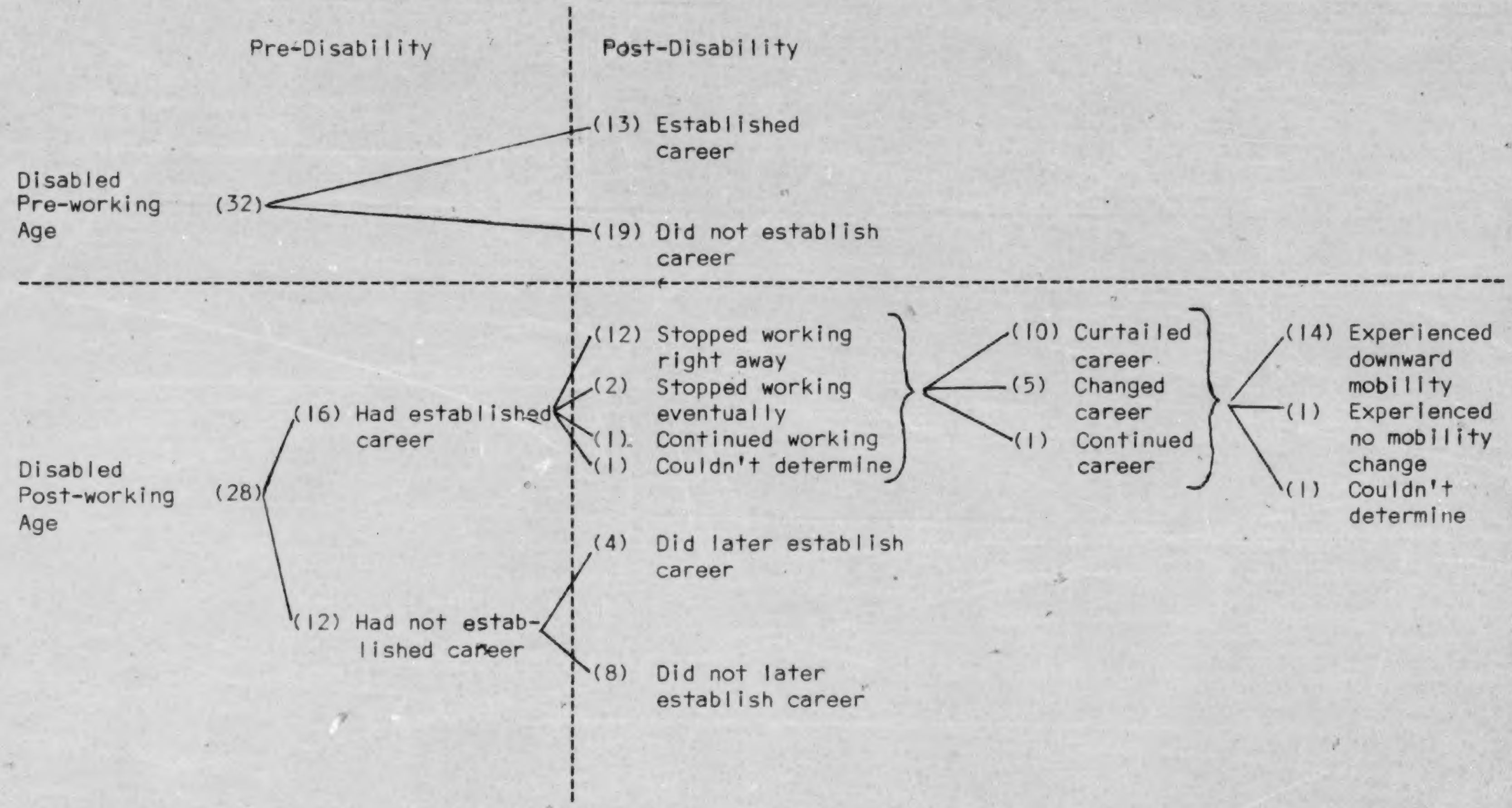
One area of data analysis with regard to employment that warranted extra attention was an investigation of the impact of one's disability upon one's career path. We classified people according to whether or not they had reached working age before the onset of their disability, and by whether and when they established a career (one job held for a period of time or several jobs in the same field). Using the late teens as the working age breaking point, we found first of all that 32 persons were disabled pre-working age, and 28 post-working age. Of the 32, 13 were able to establish a career after their disability, while 19 were not able to establish a career. Of the 28 disabled after working age, 16 had already established a career, and 12 had not. Of those 12, four went on to establish a career eventually, while eight have not. Thus, 27 of 60 persons were prevented from establishing a career, while 17 were able to establish a career post-disability. Of those 16 who had established a career before becoming disabled, 12 stopped working right away once they became disabled, two worked for a while and then stopped, and only two kept working. Ultimately, one of the 16 continued the career, five changed careers, and the other ten curtailed their careers. Expressed in terms of occupational mobility, 14 of 16 of them experienced downward occupational mobility. The path analysis on the next page summarizes those career impacts.

One of the sources of assistance in the work world for the disabled is Vocational Rehabilitation. Twenty per cent of the sample had received specific rehabilitation, but in six cases the experience was not satisfactory, and in three cases, it was a mixed one. So, three of 12 persons had a positive experience with voc rehab. Respondents aged 30-49 had received voc rehab services more than any other group (.01).

Activities of Daily Living (ADL)

The main questions asked about the ADL focused on whether or not the respondent had trouble doing each of 22 activities on his/her own, and for those which the respondent did have trouble doing, what it would take to be able to do that activity more easily. Our analyses were directed at determing 1) which activities presented the most problems; 2) what forms of assistance were most needed; and 3) what each respondent's level of disability was. The table presented on the second page following (after the path analysis) contains the information to answer the first two questions. The most trouble-

PATH ANALYSIS OF RELATIONS BETWEEN DISABILITY AND CAREERS


Pre-Disability
Post-Disability
Disabled Pre-working Age
(32)
(13) Established career
(19) Did not establish career
Disabled Post-working Age
(28)
(16) Had established career
(12) Stopped working right away
(2) Stopped working eventually
(1) Continued working
(1) Couldn't determine
(10) Curtailed career
(5) Changed career
(1) Continued career
(14) Experienced downward mobility
(1) Experienced no mobility change
(1) Couldn't determine
(12) Had not established career
(4) Did later establish career
(8) Did not later establish career

Analysis of ADL: Frequency of Yes & No Responses
& Ranking of Difficulty of Activities

Activities \ Assistance Needed	Full-time attendant	Part-time attendant	Homemaker services	Visiting nurse	Special Equip/Device	Arch barrier removal	Additional income	Indep living skills	Other/ combinations	Total Responses No	N/A	Yes	Y / Y+N	Rank (1 = Easiest)
Get in/out of bed	9	5	0	0	2	1	0	0	2	41	0	19	.317	9
Prepare meals	6	13	1	0	2	2	0	3	2	19	12	29	.60	18
Light housekpg	6	11	1	0	1	0	0	0	0	30	11	19	.39	11
Heavy housekpg	6	33	1	0	2	0	0	0	1	4	13	43	.93	22
Shopping	6	20	0	0	0	4	0	0	2	16	12	32	.67	19
Laundry	5	7	1	0	5	1	0	3	1	25	12	23	.479	14
Phone calling	3	0	0	0	5	0	0	0	1	51	0	9	.15	3
Use TV, stereo	2	0	0	0	3	0	0	0	3	52	0	8	.13	2
Admit visitor	5	1	0	0	1	0	0	0	1	42	10	18	.16	4
Dressing	9	16	0	0	0	0	0	0	1	34	0	26	.433	13
Bathing	9	17	0	0	0	1	0	0	2	31	0	29	.483	15
Put on brace	2	0	0	0	0	0	0	0	0	15	43	2	.12	1
Drinking	0	1	0	0	5	0	0	0	6	48	0	12	.20	5
Eating	1	6	0	0	3	0	0	0	3	47	0	13	.22	6
Get in/out chair	10	4	0	0	0	0	0	0	1	43	2	15	.26	7
Get on/off toilet	6	8	0	0	1	1	0	0	2	38	4	18	.321	10
Get in/out shower	5	15	0	0	2	3	0	0	5	26	4	30	.54	16
Toilet activities	7	8	0	0	1	0	0	0	1	12	30	17	.59	17
Walk 50 yards	1	2	0	0	7	0	0	0	8	5	36	18	.78	20
Walk up stairs	2	3	0	0	3	1	0	0	12	3	36	21	.88	21
Lift 10 lbs	7	7	0	0	3	0	0	0	8	33	2	25	.431	12
Push wheelchair	8	3	0	0	2	0	0	0	2	35	10	15	.30	8
Totals	115	180	4	0	48	14	0	6	64	650	237	432	.40	-
Averages (Tot÷22)	5.3	8.2			2.2	.64			2.9	29.5	10.8	19.6		
Rank (Of ADL Need)	2	1			3	4								

some activities, as probably expected, are those requiring greatest mobility: heavy housework, walking up stairs, walking 50 yards, and shopping. The types of assistance most needed were: a part-time attendant (180 mentions), a full-time attendant (115), special equipment/devices (48), and removal of architectural barriers (14).

Respondents were individually ranked by adding the number of activities they said they had trouble doing on their own. One-to-six activities meant a classifcation as "low disability," seven-to-sixteen was "medium," and 17-22 was "high." Thirty-five per cent fell into the low category, 50% into the medium one, and 15% into the high category.

Home Architectural Barriers

Three of every five respondents reported having some architectural barriers in their home or place of residence, with two-thirds of that group being plagued by the usual ones (steps, narrow doorways, high cabinets), and the rest being plaged by some unusual ones. From a separate question, we learned that 26 persons have already had some such barriers removed, including in eight cases, major structural work, minor work in 19 cases, and the installation of a ramp in 16 cases. (Eight respondents had multiple barriers removed.)

A number of different parties did the work: in eight cases, the work was done by a family member, in eight more by a contractor, in four others by a friend, in two cases by the building owner or manager, and in yet two other cases by other parties. Fourteen of the 27 alterations were paid for by the respondent and/or the respondent's family, with the rest divided among several sources.

For parties who had not yet removed the architectural barriers, the fact that the unit was a rental one or a nursing home was the main reason (13 of 27 cases). Five said it was not a vital need, and three could not afford the work.

Almost half of the respondents (45%) have been forced at one time or another to move from a unit either with architectural barriers or other situations problemmatic to the disabled. In 12 of those cases, steps were the problem, while eight persons wanted to be closer to some needed facility or service. Only one person in four said that the cost of the move was a major one.

Despite not having removed all the barriers, a large majority of the sample (73%) was still satisfied with its living arrangements; 22% felt dissatisfied. The uncertainty of being able to find a better place and the anticipated costs of moving were the main reasons cited by the dissatisfied for not yet having moved.

We asked the respondents where they would want to live, were they to move soon. The largest group (38%) would choose a suburban area, while one in four would choose areas even farther out, and 23% would choose the central city. Almost half (47%) would want a single-family detached house; 13% would choose a high-rise building, and the rest showed no clear pattern of preferences. The largest number (25 respondents) would have no preference about the population mix; only one respondent wanted to live mainly with other disabled.

Of those presently not living independently, not one said he/she would not want to live independently.

Nearly half of the sample (45%) had found some ways to increase their own mobility. For 11 persons, it was the acquisition of better skills in using a wheelchair. The others had increased their mobility either by improving their manual dexterity, or simply by disciplining themselves.

Outside Architectural Barriers

A variety of architectural barriers is regularly encountered by our respondents when they leave their home and move around the community. In an effort to determine which are the worst offenders among those barriers, we asked which one the respondent would want to correct first. The frequency with which different ones were mentioned is contained in the following table.

Type of Barrier	No. Mentions
Steps	17
Inaccessible public building	16
High curbs	14
Inaccessible bathrooms	3
Narrow doorways	2
Heavy doors	2
Other	6

Transportation

The first question asked of respondents about this important subject was what trips they regularly take, and by what mode of transportation. All but three respondents take at least one trip regularly. (One of those three was quoted as saying, "I haven't gone anywhere in ages.") Thus, the total of 167 trips divided by 57 respondents yielded an average of 2.93 trips per respondent. The frequency distribution of destinations is presented below.

Destination	No. Mentions
Shopping	49
Entertainment	35
Visiting	29
School	18
Work	16
Church	9
Medical treatment	8
Other	3

About two-thirds of those trips are by car - either the respondent's own car or one driven by a relative or friend, as shown by the table below.

Mode of Transportation	No. Mentions
Drives self	59
Driven by relative	36
Driven by friend	23
Regular RTD bus	21
Wheelchair	9
RTD Handiride	6
Ambo-cab	4

More precise questions were asked about the frequency of use of various transportation modes. We learned that 92% of the respondents never use the regular RTD bus, and 83% never use the Handiride. Only six persons use the Handiride more than twice a week. The ambo-cabs are not used at all by 63% of the respondents, and two-thirds of those who use it do so less than once a month. Another 58% never use regular taxicabs, and of those who do use it, 71% do so less than once a month. Half our respondents never use a car they personally drive, although four of five respondents do get rides from relatives or friends, with 30% getting a ride at least once a week. Finally, only 15% of the sample ever get a ride from some agency or organization.

Almost everyone (90%) in the sample has heard of the RTD Handiride, but one-third said they didn't need or want the service. Of the others who might want the service, 11 would like the service but haven't applied, 13 applied but were rejected, and 10 are presently being served. Those rejected were told they were off the route (4 cases) or the schedule (3 cases), or got no definite response (5 cases).

Close to half the respondents (47%) hold a negative opinion of the Handiride service, compared to 38% who view it favorably. Respondents under age 30 are much more negative about the program (.01). Whether one's opinion about Handiride was based on personal experience with it or the experiences of others made some difference in the kind of opinion held in that of those who had personal experience with the program 63% had negative views, compared to 50% negative views among those who had only heard of it. Thus, a previous negative opinion of Handiride is only strengthened by personal experience with it!

The ability to drive oneself is very important, as noted by one person who commented, "I get to do what I want to do, but that's only because I can get around (drive)." Accordingly, efforts were made to find out how many persons could drive now, or might be able to later on, and it was ascertained that 42% can now drive, another 10% might be able to drive with special equipment, and 23% were unsure if they would be able to drive. Only 25% said they would not be able to drive, even with special equipment. We were able to learn a few things about who does and who does not drive. First, those disabled before age 13 are not very likely to drive (.01). Second, driving now is related to having a higher income (.001). Third, present driving ability is related to higher education levels (.0002) and to having had post-disability education (.17).

Some focus on driving ability seems justified since 57% of the respondents have some unmet transportation need. Eleven persons said they hardly ever get out, ten said they can't travel very far, and six complained about not being able to get some specific place. Unmet transportation needs were especially frequently noted among those with attendants (.01) and those in nursing homes (.01).

Socializing

One area of life for which transportation ability or disability is very relevant is socializing. Fully 43% of our respondents report that they do not have enough chance to meet people, with this feeling especially prevalent among women (.01). In addition, for those over age 20, the feeling of isolation increases with age.

Looking into present patterns of association, we saw that for 48% of the sample, most respondents are a mix of the able-bodied and the disabled, while for 45%, most associates are the able-bodied. Seven per cent said most of their associates were disabled. This is pretty much the way our respondents would have it since 68% have no preference for associates, 25% would prefer a mix, and no one wanted only disabled associates.

Respondents were also asked whether their disabled and able-bodied associates feel uncomfortable with the other group. In each case, they said that about 60% of their associates felt uneasy with the other group. The statement of one respondent pinpointed that inter-group problem: "I'm no longer included in my old circle of friends: it (my disability) bothers them." Another added, "Many 'normal' people have a revulsion toward the physically disabled. Perhaps they fear they might be in my shoes (a wheelchair) some day." Yet another said, "I'd like greater opportunity to meet people on a more intimate level - it seems that many are hesitant to approach me."

Recreation

Respondents indicated for us their favorite leisure time pursuits; we were able to code and tabulate up to three separate activities for each respondent. Activities were categorized as either active or passive, and either at-home or away-from-home. At-home passive activities were most popular with 82 mentioned, followed by away-from-home passive pursuits (41), away-from-home active pursuits (36), and finally at-home active pursuits (8). A fuller listing of the responses is shown in the following table.

Activities	No. Mentions	
At-home passive		82
TV, stereo, radio, etc.	24	
Reading	14	
Sewing/knitting/etc.	6	
Arts & crafts/shopwork/etc.	5	
Writing	4	
Others	29	
Away-from-home passive		41
Movies	12	
Dining out	6	
Concert/theatre	5	
Others	18	
Away-from-home active		36
Swimming	10	
Wheelchair sports	4	
Fishing	3	
Others	19	
At-home active		8
Gardening	2	
Others	6	

Approximately one respondent in three felt s/he had enough opportunity to engage in these activities. If respondents had some special assistance (e.g. attendant, special equipment), they could do other activities as well, they said. Among those other desired recreational activities were: hiking/camping/fishing/hunting (22 mentions) and other water sports (17 mentions). Frequent mention was also made of other varied indoor passive and outdoor active sports or leisure time pursuits. The kinds of assistance most needed to pursue these activities would be an attendant (25 mentions), special equipment (18) and transportation (15).

About three times as many respondents gave metro area recreational opportunities for the disabled a negative rating as those who gave it a positive rating. Women were especially critical (.10), and negative ratings increased with the age of respondents (.05). The steps that had to be taken to improve those opportunities were better transportation (cited by 20 persons) and better accessibility (cited by nine persons).

Other Outside Activities

We tried to determine how often respondents get out for various other activities, and whether or not they felt that was often enough. The table below shows that only shopping and church-going are engaged in often enough for most respondents, and the greatest deficiencies are with mountain-trips and sporting events. The table also shows that for most people, most of the activities are engaged in less than four times a year.

	Frequency				Often enough	
Activities	-4x/year	4-12x/year	2-4x/month	2-7x/week	Yes	No
Shopping	20%	27%	37%	17%	52%	48%
Movies/concerts	50	28	20	2	35	65
Sports events	75	15	8	2	30	70
Park trip	58	22	17	3	37	63
Mountain trip	65	30	5	0	27	73
Public meetings	67	24	2	7	36	64
Library/museum	76	15	2	7	39	61
Church	49	16	31	4	53	47
Visiting	38	22	30	10	43	57
Averages	55%	22%	17%	6%	40%	60%

Summarizing a long series of cross-tabulations designed to learn who does and doesn't get to do these activities often enough, we see the following: 1) nursing home residents don't get out often enough; 2) those disabled longer than ten years don't get out enough; and 3) except for those under age 20, who are generally dissatisfied in this area, that dissatisfaction increases with age. Those who tend to feel they get out enough to do these activities are: men, those who were disabled between ages 13 and 20, and higher income respondents.

On a follow-up question, the general dissatisfaction shown above is underscored as we see that 55% of the respondents have still other activities they would like to be doing. This sentiment generally increases with the age of respondents and is seen more among women (.02). Transportation is the one obstacle most often cited by respondents.

Family

How crucial a role the family of the disabled can play is epitomized in the statement of one respondent: "I've gotten through much; at times it seemed that only my immediate family cared." Our first questions in this area wereabout the quality of relationships and the frequency of familial contacts. Asked whether they see their families as often as they would like, our respondents responded affirmatively in 62% of the cases and negatively in 35% of the cases. Respondents who can drive responded affirmatively more often than those who cannot drive (.05). Also, a majority of respondents over age 50 said they don't see their families as often they would like, and in general, negative responses on this question increased with age.

For most people in our sample (63%), family relations are as good as they would like, while for 27% that is not the case.

Our sample was clearly divided on whether they were dependent upon their families, with 50% saying "yes" and 43% saying "no." Those least disabled were least dependent (.10); and there was a trend (not statistically significant) for dependence to increase with amount of education on the part of the respondent (.17). In most (61%) cases of dependence, the dependence is basically a financial one, though small numbers of respondents are dependent on their families for attendant care and/or transportation.

The converse question about dependence was also asked, and it was learned that in 40% of the cases, families are dependent upon our respondents - mostly for financial and homemaking purposes. (For both respondents and families, there were emotional dependencies; this was assumed and not analyzed, since we chose to look at those other avenues of dependence.)

A large majority of our respondents (63%) said their family or marriage had been in some way affected by their disability. In 86% of those cases, the impact was a negative one, compared to 14% positive impacts. The kinds of negative impacts included divorce of the respondent, divorce elsewhere in the family, overprotectiveness, and most often generalized strain. In addition, disability affects one's chances of marriage: those disabled before age 20 are far more likely to remain single than those disabled later (.001). Also, those who have disabled more than ten years are more likely to be single than those disabled a shorter period of time (.02). Dovetailed with that finding is another one, though not statistically significant, which suggests that as age increases, so do the chances of marriage dissolution (divorce, separation, and loss of a spouse). We also found - though this too failed to reach the level of significance desired - that the most severely disabled were most likely to say their marriage or family had been affected by their disability. (.14).

Only 27% of the sample said they felt there was something that could be done, with regard to their disability, that could enrich or improve their marriage or family life. Most often cited were increased independence/mobility/transportation (eight cases) and easing of financial burdens (four cases).

Resources for Assistance

Most of the respondents (60%) do not feel well informed about the kinds of assistance available to them as disabled persons; only 10% feel very well informed. Three of four, however, feel knowledgeable about their disability and the medical care of it. More than a few of our respondents report that they have become walking encyclopediae about their particular disability. Acknowledging the relevance of these questions was the comment of one respondent who noted there are "lots of things you need to learn right away when disability sets in." A high level of medical knowledge appears to be related to more education (.01), but not to high disability: the more severely disabled are less knowledgeable about their disability than the less disabled (.08).

Slightly more than half (53%) said they had on occasion helped some other disabled person obtain some kind of assistance. Most often (56% of the cases) this help took the form of informally sharing information. This behavior was seen more often among younger respondents (.05).

Numerous different assistance programs are available to the disabled; we asked our respondents about their experiences with each of 18 different programs. As the table below shows, the experiences have indeed been varied - from Medicaid (23 persons served and only one unaware of the program) to the Self-Support program (not serving any of our respondents and not even familiar to 53 of them). The average respondent is being served by 2.6 programs, feels ineligible for another 6.7 programs, does not need another 2.2, and has 3.4 other programs he/she has not heard of.

Programs	Have not heard of	Heard of, not eligible	Heard of, not needed	Heard of, not worth applying	Heard of & want, not applied	Applied, no response	Applied, rejected	Being served	Other experiences
Voc Rehab	2	2	5	3	4	0	4	18	22
Gen Assis	9	16	14	0	3	0	1	12	5
Homecare	20	14	11	0	1	2	1	6	5
Colo SSI	25	18	5	0	0	0	0	3	9
AND	19	23	9	0	0	0	0	5	4
ADC	13	28	13	1	0	0	0	1	4
Homemaker	11	21	12	2	2	0	0	3	9
Food Stamps	1	31	14	5	1	0	0	4	4
Rent Subsidy	20	18	9	0	4	1	0	4	4
Soc Security	1	40	5	0	1	0	0	5	8
Soc Sec Dis	6	12	3	0	1	1	3	24	10
Medicare	3	17	5	1	1	0	1	18	14
SSI	3	25	6	0	0	0	1	18	7
Medicaid	1	24	7	1	1	0	0	23	3
Work Comp	1	45	5	1	0	0	1	5	2
VA Benefits	1	52	4	0	0	0	1	1	1
Self-Support	53	4	0	0	1	0	0	0	0
Pvt Agencies	14	10	4	3	1	0	0	5	23
Totals	203	400	131	17	21	4	13	155	136

More than two-thirds (41 respondents) of the sample have experienced the runaround when seeking some service or assistance. Most often, it was simple red tape (12 cases); nine others had specific problems with Social Security Administration, and six with Vocational Rehabilitation. One person felt the major problem with the various assistance programs was that there are "many programs in existence, but run by the wrong people (able-bodieds)."

Only one-third of our respondents reported having a regular caseworker from some agency or program. The sample is split 50-50 on whether or not their caseworker seems knowledgeable about possible resources for the respondent, and are also split 50-50 on whether or not they are satisfied with that caseworker.

A total of 22 respondents listed some kind of service or program which they would like to see but which they believe (whether correctly or not) does not presently exist. By far the greatest need was for varied transportation services, mentioned by ten persons. Two persons mentioned attendant services, two mentioned mainstreaming programs, and two mentioned rehabilitation or Social Security as the missing programs. We found non-significant trends for the unmet need to be related to lower income and to less knowledge about resources. Some specific services called for included:

-Employment services
-Evaluation of potentials for living with aid
-Independent testing of orthopedic appliances
-Home health care
-Discounts on licenses and taxes
-Training programs for rehabilitation interns
-Recreation areas exclusively for the disabled
-Information clearinghouse
-Recreation therapy for the young disabled

Political Views

In an open-ended format, we asked the respondents to describe the situation of the disabled in our society. Fully 86% described that position in negative terms, contrasted with only 8% who used positive descriptions. Twenty-six persons specifically made reference to discrimination, 15 mentioned being ignored, 13 mentioned being treated as freaks, 12 said changes were not being made fast enough, and 13 mentioned other negative situations in which they saw the disabled. To one person, the problem was that "We're not allowed to be independent, or intelligent."

Slightly more than two of every three (41 of 60) respondents view themselves as part of a minority group that is somehow stigmatized or discriminated against. Of that group, about three in four react negatively to that position (anger, frustration, disappointment). A few persons indicated they just have to accept that status, while a few others were indifferent about it.

We asked the group whether they agreed with a frequent governmental policy of classifying the physically disabled with the elderly, and learned that 80% disagreed with such a categorization.

The greatest frustrations experienced by our respondents were classified and tabulated as follows:

Frustrations	No. Mentions
Can't be self-supporting or independent	14
Can't get around	12
Can't do desired things	11
Dealing with the able-bodied	11

On the flip side, the achievements from which the respondents derive most satisfaction were:

Achievements	No. Mentions
Being able to do as much as I can	22
Being able to do some specific thing	21
Being able to help others	5
Having my family	5

Of the 60 respondents, 22 or 37% belong to some organization working on the concerns of the disabled. Those disabled through accident are most likely to be joiners, while the congenitally disabled are least likely (.09). A somewhat larger proportion (47%) have been part of an effort to change some law, policy, or regulation affecting the disabled. About two-thirds of such efforts were done as part of a group, with the rest being individual efforts. A very large majority (88%) would like to be more active on issues of concern to the disabled, and most appear to be ready to play whatever role needs to be filled. Close to half (47%) feel the disabled are not working hard enough themselves on their problems, though 20% say they are, and 17% say some are and some are not.

Of 42 respondents willing to answer the question about political labels, 13 called themselves conservatives, 13 liberals, 12 middle-of-the-roaders, and four radicals. Regardless of political persuasion, most (67%) do vote. Other approaches to bringing about social change for the disabled were also seen as useful: 25 persons were supportive of varied educational programs, 18 would emphasize publicizing and making more visible the situation of the disabled, 13 called for lobbying and pressuring decision-makers, 11 would emphasize letter-writing, and another 11 say direct action and demonstrations are needed.

Using the responses from six separate questions about respondents' political views and participation, we constructed a scale of political consciousness. Respondents were then classified as high, medium, or low politically conscious. Forty per cent fell into the "high" category, 50% into the "medium" category, and 10% into the "low" category. Low political consciousness was found to be related to satisfaction with one's life style (.06) and income adequacy (.04). Statistically insignificant relationships were found between high political consciousness and length of disability (.21), having post-disability education (.23), and having been forced to move (.26).

Another way to look at the matter of consciousness is to ask about satisfaction with one's present life style; the data show 52% satisfied and 40% dissatisfied. This question of satisfaction needed to be scrutinized more closely; the list below shows that satisfaction is related to many other variables about our respondents:

-Living independently as opposed to being institutionalized (.02)
-Having adequate arrangements for handling periodic depression (.02)
-Having good family relations (.04)
-Being either high or low, but not medium, on the ADL scale (.04)
-Not having any unmet transportation needs (.04)
-Not having your outlook on life changed in a negative direction by one's disability (.06)
-Not having other desired activities one doesn't get to do (.10)
-Not being dependent upon one's family (.14)
-Having an acquired disability as opposed to a congenital one (.20)

-Not using an attendant (.25), and
-Getting out often enough for: shopping (.002), park trips (.01), public meetings (.03), church (.03), movies, concerts, theatre (.05), visiting (.09), visting libraries/museums (.14), sports events (.14), and mountain trips (.16).

Suggesting perhaps a revolution of rising expectations, whereby one's sense of progress being made leads to even greater frustration, the data from another question show that 70% of the respondents felt they had become more independent over the last year compared to only 12% who felt they had become less independent.

Exactly half of the respondents expressed a need for some assistance in developing the ability to live more independently, while 45% did not feel such a need. The persons most desirous of independent living skills are those one would expect: nursing home residents (.001), those who are congenitally disabled (.03), and the most severely disabled (.001).

Mental Health

The data on the social psychological consequences of a severe physical disability are interesting in that they suggest that one's basic outlook on life, if affected at all, is more often than not affected positively, but that most of the disabled episodically experience negative emotions they attribute to their disability. More specifically, 26 persons say their outlook on life was positively affected (nine became more aware and now take less for granted; eight became more caring and sensitive; five became stronger persons). In the words of one person, "I look at things differently now, I've come in contact with a different population." On the other hand were 14 persons who experienced a negative change in their outlook. The only negative change cited more than one was withdrawal, something cited three times. Those respondents who are dependent upon their families more often report a negative change in their outlook (.04). For those 44 persons who say they sometimes experience negative emotional states, frustration and anger are the emotions often often experienced (27 mentions), followed by depression (7), helplessness (3) and worthlessness(2). The way one respondent put it was, "It makes me angry because people don't pay attention to me (because I'm disabled."

Looking specifically at depression, we asked how it is handled. Thirty-seven per cent do something else to take their minds off it or engage themselves in some social activity; 25% work it out introspectively; 17% have a talk with someone specific; and 13% just wait it out. For most people (57%) the arrangements they cited are seen as adequate, but 25% say their method is not adequate and 15% are not sure how effective it is. Despite that expression of inadequate ways of dealing with depression, only 8% of the sample are receiving any professional counseling.

Our respondents are very open to almost any kind of counselor with 63% not caring whether the counselor is male or female, and 19% having a preference in that area. Similarly, 77% don't state a preference for a disabled or able-bodied counselor. Ten per cent would prefer a disabled counselor and 8% specify an able-bodied counselor. A total of 55% cared neither whether the counselor was male or female, or disabled or able-bodied.

There does appear to be a need for groups in which the disabled can share their experiences with their peers: 73% said they would like such an experience. A need does also exist - though less pronounced - for sexual counseling in that 35% of the sample have at some time felt such a need, and three-quarters of that group did not get adequate counseling on those occasions. Another kind of counseling needed is suicide crisis counseling: 12 persons admit to having attempted suicide, with only five of those having obtained good counseling about the matter. There were no clear patterns about who is more or less likely to have attempted suicide.

Chapter Fourteen Summary of Recommendations

This chapter will highlight some of the most important recommendations toward independent living that have been discussed in the preceding chapters. The attention is directed into three principal areas.

1. Governmental Action - This is the largest area where recommendations fall. Many of the changes call for modification of existing rules and policy rather than new legislation or regulation. The recommendations concern all levels of government.
2. Atlantis Community, Inc. - While the regulations and standards are set in governmental action, they are often best executed at the local grass-roots level. Organizations like Atlantis can continue to enhance independent living for physically disabled persons.
3. Appointed Commissions - The Denver Mayor's Commission on the Disabled and the Governor's Advisory Council on the Handicapped are the two key public agencies in the state dealing directly with the problems of the severely disabled.

Our goal in this section is not to prioritize the recommendations, but to illuminate those that need immediate action. As the previous chapters have illustrated, successful independent living is composed of many factors working together. Many of the suggestions are of a general nature, however the background, the problems and the scope of the recommendations can be better understood by analyzing the related chapters of the report.

GOVERNMENTAL ACTION

The following recommendations relate to the local, state and federal levels of government. In some cases policy needs to be modified, in others a regulation should be changed and for some, legislation must be amended.

*Re-arrange payment schedules so there is no dollar incentive for any level of government to keep people in nursing homes, Chapters 2, 3, and 4.

*Make Homemaker Service available as well as Homecare Assistance (Attendant care), Chapter 3.

*Increase the State maximum level of income from $185/month to $250/month and include a cost of living adjustment, Chapter 2.

*Streamline the present public assistance system to avoid overlapping, duplications, and disincentives, Chapters 2, 3, and 4.

*Revise zoning codes to specifically allow group homes, Chapter 10.

*Create tax credits for removal of architectural barriers, Chapter 10.

*Initiate training in architectural barriers and sensitivity to handicapping problems for building inspectors and others in the field of code enforcement, Chapter 10.

*Increase the Homecare Allowance to $400/month and include a cost of living adjustment, Chapter 3.

*Create a common set of criteria for data collection concerning disabled persons such as through the national census, Chapter 13.

*The Colorado Public Utilities Commission should regulate private-for-profit wheelchair transportation companies, Chapter 6.

*Eliminate the current disincentives from earning an income: the $2400/year limit by SSI/DI; the $65/month limit on SSI; the two year waiting period on Medicare; and the SSI eligibility link with Medicaid, Chapter 2.

*Section 8 Rent Subsidy eligibility should be opened to more disabled persons as an incentive to independent living, Chapter 10.

*Legislation should be enacted that would mandate the government to provide a newly disabled indiviudal with information on disability benefits and public assistance services, Chapter 11.

*The Denver Public School system should begin action immediately toward the goal of eliminating "special schools" and as an alternative, mainstream disabled students into regular schools, Chapter 7.

*The Colorado Division of Rehabilitation and Employment should actively work together in the areas of job development and job placement for the physically disabled, Chapter 8.

*All government buildings should be made accessible to the disabled population, Chapter 10.

*The State Division of Parks and Outdoor Recreation and the City of Denver Department of Parks and Recreation should recognize the recreation needs of the disabled, Chapter 9.

*All levels of government should establish affirmative action programs incorporating the physically disabled, Chapter 8.

*All agencies working with the disabled should recruit and place more qualified disabled staff members within their organization, Chapter 8.

*The Colorado Division of Rehabilitation should recognize independent living as a rehabilitative goal and develop an active outreach program to service the severely physically disabled, Chapter 8.

*Mainstreaming of disabled students into regular schools should incorporate attendants to meet individual needs, Chapter 7.

ATLANTIS COMMUNITY, INC.

There are many things that Atlantis can carry out as part of a multi-faceted approach to independent living. Almost all of the programs, however, require outside financing to make them a reality. The expertise of Atlantis in meeting the needs of severely disabled persons is the greatest advantage.

*Develop and operate a multi-purpose center (Chapter 10) serving the informational, referral social and special needs of the disabled, Chapter 13.

*Operate in conjunction with the Division of Rehabilitation a job training and development program including computer training for the disabled, Chapter 8.

*Actively work to increase transportation options for the disabled through RTD and UMTA sponsored grants, Chapter 6.

*Increase counseling resources for the disabled by establishing a peer counseling program, Chapter 5.

*Develop an advanced training program for personal attendants, including an attendant management program for disabled persons, Chapters 3 and 5

*Expand the existing referral information service including the Hotline by emphasizing medical, attendant, financial, educational, personal, and housing assistance. Chapters 3,5,6,7,8 and 10.

*Utilize the expertise of the organization and people by contracting for Innovation and Expansion Grants and Research and Demonstration funds, Chapters 3,5,6,7,8, and 10.

APPOINTED COMMISSIONS

The Denver Mayor's Commission on the Disabled

The Denver Mayor's Commission on the Disabled should be one of the most powerful agencies in the City. As stated in its establishing ordinance #624 of 1974, the functions of the Commission "...shall be to foster concern for the problems of the residents who are disabled; ...to encourage the development of programs designed to provide services; ...include programs specifically designed to redress the effects of discrimination; ...to coordinate and evaluate such programs; ...to cooperate with Regional, State, and Federal agencies and non-governmental organizations; ...to conduct investigations and studies on any problems or services for the disabled; ...to make reports and recommendations relating to programs for, or problems of, the disabled; ...and to act in general as an advocate within the city government for the interests of the disabled."

The powers continue with directives relating to the City and County of Denver; "...assist in the preparation of all applications by agencies and departments of the City and County of Denver for federal and state assistance; ...advise the Mayor and City Council in evaluation and endorsement or disapproval of proposed and existing projects, programs and services for the disabled." One of the most important parts of the legislation relating to the Mayor's Commission on the Disabled states: "...the services of all city departments and agencies shall be made available by their respective heads to the Commission at its request. Upon receipt of recommendations in writing from the Commission, each department or agency shall submit a reply in writing to the Commission indicating its position of an action taken with regard to such recommendation."

It should be noted that the Commission has exercised leadership in several areas of disabled living. Strong initial support for Atlantis came from the Commission. The Colorado White House Conference was coordinated from the office and the Executive Director serves on many committees and boards for the disabled.

However, the functions and powers of the Commission have not been flexed to their potential, especially in the areas of most concern. While it is commendable that the Commission is involved in fund raising drives and public relations support for the disabled, the key issues are not sufficiently met. Examples would include housing, education, job training and legislation. An active working relationship does not appear to have been established with the service agencies of the City and problems are met by reaction rather than action. The Commission is overstaffed in clerks and professionally understaffed to meet its full responsibility and should shift its composition to include more professionals. The Commissioners should take a more active role in policy, decision and problem solving and a definitive goal and objective program should be outlined for the entire year.

Atlantis believes the Commission on the Disabled can be a stronger advocate for the disabled than it has been. Within the Metro area and the Metro governments the Commission on the Disabled along with the Governor's Advisory Council on the Handicapped have the greatest potential to serve as a hub for disabled actions. Therefore, many of the recommendations highlighted for the City and County of Denver and the Metro area are directed at the Mayor's Commission on the Disabled.

The Governor's Advisory Council on the Handicapped

This Council composed of a wide spectrum of volunteers, has been attempting to define and solve problems of the disabled on a broad, state wide, policy making basis. The Council in the past has had no paid staff at all, and its efforts have of necessity been limited. The Council has been instrumental in securing passage of the first civil rights ordinance for the disabled in Fort Collins and drafting of a similar law for the entire state. Valuable work has been done in working to eliminate and prevent architectural barriers.

This year, 1977, $20,000 has been appropriated to pay for a staff person which should increase the scope and effectiveness of the Council. State-wide issues that need particular attention are: effective affirmative action program for state employment of the disabled, participation in legislation for the disabled, stronger coordination of the many activities on behalf of the disabled.

The following objectives should be advocated, coordinated, and met by the Denver Mayor's Commission on the Disabled and the Governor's Advisory Council on the Handicapped:

*Housing
- -General information
- -Housing referral
- -Accessible apartment units
- -Contractor lists for rehabilitation
- -Volunteer architects list
- -Establish working relationship with local building departments publicizing the importance of barrier removal

*Education and Employment
- -Stress mainstreaming in public schools
- -Coordinate vocational education for disabled
- -Promote job development and training
- -Establish tutoring pools for disabled adults and children

*Health
- -Maintain and publicize attendant referral lists
- -Maintain counseling referral material
- -Work with hospitals for easy flow of disabled records
- -Check hospitals and ambulance attendants for knowledge of disabled problems
- -Help promote dentistry for the disabled
- -Work as advocates for better medical insurance for disabled as an incentive to independent living

*Transportation
- -Monitor RTD's disabled service
- -Push for reform of private wheelchair transportation service
- -Provide transportation referral information

*Other
- -Recreation referral
- -Work with the phone company and other public utilities as an advocate for disabled problems
- -Coordinate private agency interaction - ie. Muscular Dystrophy, Multiple Sclerosis, National Paraplegic Foundation and others
- -Establish a disabled speaker's bureau
- -Push for automatic curb cuts on all street repair work
- -Establish a public relations position on the staff to promote disabled information

The Mayor's Commission on the Disabled should take the responsibility of following up on all recommendations in this document. The Commission should monitor the organizations and agencies involved in services for the disabled and determine whether reasonable implementation efforts are undertaken. In December 1977, the Commission should issue a progress report on the recommendations in this report and their status at that time.

APPENDIX

Housing

Survey Summary

Survey Instrument

Financial Income and Expenditures

HOUSING APPENDIX

Summary of Housing Financing
(For a brief review of the key housing programs see Chapter Ten.)

Program	Type of Assistance
HUD Section 8	Rent Subsidy Payments New construction, rehab, existing
HUD Section 202	Direct loans for rehab or new construction
HUD FHA 221 (d) (3) (4)	Mortgage insurance for conventional loans
HUD Section 231	Mortgage insurance for conventional loans
HUD FHA 235	Mortgage insurance for conventional loan (single family)
HUD 312	Rehabilitation Loans
HUD Traditional Public Housing	Low-income housing
HUD Section 106B	Low-income planning loans
Veterans Administration	Home loan Guarantee Direct Home Loans
Conventional	Non-government bank financing
Colorado State Housing Finance Authority	Loans and financing assistance
Denver Urban Renewal Authority	Owner rehabilitation guarantee loans

Social
Change
Systems
Inc.

A SUMMARY OF

A NEEDS ASSESSMENT SURVEY
OF SEVERELY PHYSICALLY DISABLED ADULTS
IN THE DENVER METROPOLITAN AREA

Conducted for
Atlantis Community, Inc.

December 1976

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INTRODUCTION

The aim of this survey was to determine the needs of the severely physically disabled adult population of the Denver metropolitan area, so that The Atlantis Community could use that information in program planning and development. The severely physically disabled, as defined by Atlantis, are those who are bed-bound, wheelchair-bound, or in need of an attendant to help with the activities of daily living. We also limited our survey to persons between 12 and 60 years of age. Using a 14-page questionnaire, we conducted face-to-face interviews with 60 such persons from August to October 1976. Interviews averaged about two hours and were conducted at the respondent's place of residence.

WHO THE RESPONDENTS WERE

Fifty-three per cent of the respondents were male, and 47% female. Seven per cent were under age 20; 33% 20-29; 42% 30-49; and 18% over age 50. The largest part of the group was single. Eighty-two per cent lived in private residences with the rest in nursing homes. About one-forth of the group were born disabled, one-third were later disabled through some accident, and the rest acquired their disability later, but not through accidents. Including those born with their disability, 48% had been disabled 10 years or longer. Fifteen per cent have full-time attendants, 57% part-time attendants, and the others do not use attendants. Generally the group is better educated than the overall metro area population, and 48% have had some college education.

USE OF ATTENDANTS

Fewer than half of the attendants used are paid for by some public program. Sixty-five per cent of those using attendants need them for less than half the day. People's experiences with attendants has not been very good; most people have had bad experiences with them, or mixed experiences at best; this was especially true for women and respondents over age 30. Most of the group manage their own attendants, but over 3/4 of them would be interested in an attendant-management course.

MEDICAL CARE

About half of the respondents receive regular medical treatment or some form of therapy for their disability. The largest number had their medical expenses covered by some public program (Medicaid, Medicare), but over 90% of those using over-the-counter (non-prescription) drugs or supplies pay for those out of their own pockets. Overall, 70% are satisfied with the medical care they are receiving. For those not satisfied, the biggest problems are cost and a lack of good comprehensive and sensitive care.

SPECIAL EQUIPMENT

The special equipment used by most respondents included manual wheelchairs and varied prosthetic equipment, such as braces and splints. Sizables numbers of people needed certain equipment, but didn't have it (e.g. transfer equipment, specially-equipped car, electric wheelchair). Electric wheelchairs provided the most problems in terms of maintenance or repairs. One out of every two persons had some idea about some device or equipment they would like to see invented or manufactured, and a like number had already designed some home-made implement to ease their lives or increase their mobility.

EDUCATION

As mentioned earlier, educational achievement was quite high, and much of that education came post-disability; 60% of those disabled after birth had some education after the onset of their disability. The varied schools which the respondents had attended received mixed ratings both in terms of the educational experience and in terms of their sensitivity to the disabled student. Almost one person in three is now attending school, especially the younger, moderately disabled, and those who can drive. About two-thirds of that group are helped by some public program. Transportation problems and money hassles seem to be the biggest obstacles to school attendance for those not in school.

INCOME AND FINANCES

The average respondent had two different sources of income, and about 2/3 had one source that was not a public program. Overall, income levels were very low, with only two persons reporting incomes over $1000/month, and almost 60% have incomes of $400/month or less. The more recently disabled and those with more formal education reported higher incomes. Almost half of the group said they were not getting by adequately on their present incomes. An analysis of spending patterns shows greatest out-of-pocket expenditures for rent/housepayment, food, transportation, utilities, and recreation. Budget items with the smallest personal expenditures for the typical respondent were: medical care, medicine, equipment and supplies, and attendant care.

EMPLOYMENT

About one-third of the sample currently are employed, mostly at part-time jobs. It's interesting to note that those with full-time attendants are the ones most likely to be employed, and that there was no relationship between being employed and one's level of disability as measured by ability to engage in the activities of daily living. Employment does appear to be related to one's educational achievement.

There was a wide discrepancy between our respondent's skills and the kind of work they actually were doing, and this results in much job dissatisfaction. In addition, many persons had experienced employment discrimination on one or more occasions.

Our sample viewed working as the chance to be self-sufficient and independent. A thorough analysis of the impact of disability on one's career showed that most of those disabled before they reached working age (late teens) never did develop any career subsequently, and that most who had started working before they became disabled, had their careers either curtailed completely or altered in the direction of downward occupational status.

ACTIVITIES OF DAILY LIVING

An effort was made to find out which of 22 different activities of daily living (ADL) our respondents had trouble doing and what it would take to enable them to do those things more easily. The most difficult ADL were those requiring greatest mobility as one would expect. In terms of what would help, the greatest demand was for 1) part-time attendants; 2) full-time attendants; and 3) special equipment or devices, in that order.

HOME ARCHITECTURAL BARRIERS

Three of every five respondents has experienced some architectural barriers in their homes, though almost half have already made some alterations to remove some barriers. Due to such barriers or other problems like that, almost one-half of the respondents have been forced to move at one time or another. Despite these problems, about three of every four persons are still satisfied with their current living situation. Preferences expressed - were respondents to move - lean toward single-family housing in suburban areas. Of those not now living independently, not one would not want to live independently.

COMMUNITY ARCHITECTURAL BARRIERS

Architectural barriers most often encountered out in the community include steps, inaccessible public buildings, and high curbs, in that order.

TRANSPORTATION

The average respondent makes almost three regular trips outside the home, most often for shopping, entertainment, and visiting. The private auto is the most frequently used transportation mode. There is very little use of either the regular RTD bus or the RTD Handiride, or the ambo-cabs for that matter. The overall opinion of the Handiride service leans toward the negative, and actual experience with it only strengthens that evaluation.

The ability to drive stands out as a major liberating force and is related (causally or not, we can't say) to higher education and income levels. Finally, better than one of every two persons still has some transportation need that is going unmet, especially the most severely disabled and those in nursing homes.

SOCIALIZING

Over 40% of the respondents feel they don't get enough chance to meet oter people, and this feeling was especially prevalent along women, and for those over age 20, the feeling increased with age. Most respondents prefer to mix with the able-bodied, and their present patterns of association reflect that preference. At the same time, about 60% of them said that the able-bodied and the disabled alike feel uncomfortable around one another.

RECREATION

Looking at the present patterns of recreation, we saw that about 3/4 of favorite recreational pursuits were passive as opposed to active ones, and that the largest number were carried on at home. Many persons, however, felt they could engage in more active, more away-from-home activities were some assistance (attendant care, equipment, transportation) available. Overall, metro area recreation opportunities for the disabled were rated very negatively.

OTHER COMMUNITY ACTIVITIES

When we asked about getting out for other activities, we learned that the only things that a majority of our respondents felt they get out often enough for are church-going and shopping. Sports events and the mountains were especially hard to get to. Nursing home residents and those disabled 10 years or longer are especially dissatisfied with how often they get out. Also, dissatisfaction rose with age of the respondent. Overall, 55% still have other activities they would like to, but are not able to, do.

FAMILY

About three out of five respondents get to see their families as often as they would like, and a like percentage feel family relations are as good as they would like. About one half are dependent upon their families (mainly for financial help) and about 40% of the respondents have families dependent upon them (mainly for financial help and homemaking).

Nearly 2/3 said the disability had affected their marital or family relations, and in fully 86% of those instances, the affect was a negative one (divorce, general strain, problems with overprotectiveness). Only one in four felt there was something that could help enrich or improve their marriage or family lives.

RESOURCES

Most respondents, while feeling knowledgeable about the medical aspects of their disability, do not feel well-informed about the various resources available to them as disabled persons. Still, more than half have on occasion been able to help another disabled person gain information or service they needed.

Of the 18 specific programs about which we asked (Medicaid, Supplemental Security Income, Homecare, etc.), the average respondent is being served by 2.6 programs, feels ineligible for another 6.7 programs, does not need or want another 2.2, and has 3.4 he or she has never even heard of.

Two of every three persons report having gotten the runaround when seeking assistance and more than one-third expressed a need for some program or service which they believe (accurately or not) does not exist.

POLITICAL VIEWS

Eighty-six per cent of the sample describe the present situation of the disabled in negative terms, and 2/3 see themselves as members of a minority group that is discriminated against. Most who see themselves that way have a negative reaction to that status. The greatest frustrations of our sample have to do with the inability to be self-sufficient and get around, and conversely their greatest achievements focus on how much they can do. More than one-third already belong to some group working to improve the conditions of the disabled, almost one-half has been part of some effort to change a law/policy/regulation, and almost 90% would like to be more active. In addition, close to half felt the disabled were not working hard enough improving their own situation.

The sample was almost evenly divided among liberals, conservatives, and middle-of-the-roaders, with a sprinkling of radicals. Regardless of political persuasion, two of three persons do vote, and as a whole, the group would support a wide range of approaches to improving their situation. High political consciousness was found to be related to life style dissatisfaction, inadequate income, longer periods of disability, post-disability education, and having been forced to move due to one's disability. Fifty-two per cent were satisfied with their present life styles versus 40% who were not. Satisfaction was related to such factors as having good family relations, having adequate arrangements for handling periodic depression, having one's transportation needs met, not being dependent upon one's family, and getting out often enough for such things as shopping, sports events, recreation, etc.

Seven of ten felt they had become more independent over the last year, perhaps explaining much of the frustration at the progress not yet made, and exactly half of the group expressed a desire to gain more skills in independent living.

MENTAL HEALTH

In general, one's basic outlook on life is not affected or it is affected in a positive way by the disability one experiences, but periodically, most disabled experience negative feelings they would attribute to their disability. Anger and frustration are the emotions most often felt. A variety of approaches is used to cope with temporary depression, and only 60% find what they do to be adequate. Still, only 8% are receiving any kind of professional counseling.

Little preference was indicated for any specific type of counselor: for most people it didn't matter if the counselor were male or female, disabled or able-bodied. There was no specific indication of a need for counseling, but a large majority did express a desire to discuss their concerns with other disabled in a group setting. A need does exist for sexual counseling on the part of a sizable group, and 20% admit to past suicide attempts, suggesting another area of need for counseling.

SOME OVERALL CONCLUSIONS

Two areas of life that a severe physical disability can affect are one's emotional life and one's family relations. In general, one basic outlook on life is not seriously affected, but the disability can bring on periodic anger, frustration, and depression. Impacts on family life can include divorce, the discouraging of marriage, and varied kinds of strain within families.

Another kind of effect disability can have on one's life is financial: the income level of our respondents was very low, and the desire to work was continually frustrated or penalized by low pay, job discrimination, or jobs that do not use one's abilities. It is also significant that for the sample as a whole, there was no relationship between employment and one's level of disability.

Two areas of need that occur repeatedly throughout the data are transportation and attendant care. The provision of these would open doors to new opportunities in work, school, socializing, and community involvement. It's important to note that for most people, the attendants would not even have to be full-time. The ability to drive by itself could lead to major changes in the life styles of many of our respondents.

Those two avenues of greater independence are worth dwelling on since it is apparent from our data that the disabled, at least our sample, have no desire to remain dependent and out of the mainstream of life. There was virtually no support for an isolationist position with regard to working, going to school, living, or socializing. Whatsmore, there is evidence of a clear desire to be self-sufficient and carry one's own load.

Standing in the way of greater independence for a good number of people is the lack of information about what's available to assist them. At least for our sample, the lack of information is certainly not accompanied by a lack of willingness to get involved and work on improving their lives.

Social Change Systems, Inc. and The Atlantis Community, Inc. would like to thank all those persons who helped make this study possible, especially the people who took the time and trouble to share very personal information with us. Participating in a survey as a respondent often seems a waste of time and an activity with no apparent payoff. We hope that sending our respondents a copy of this summary represents at least some small compensation for their time, and that the increased discussion of the situation of the disabled and the programs which may be generated will begin to justify the time they so graciously gave us.

Thank you.
Bernie Jones, Ph.D.

The Atlantis Community, Inc. can be contacted at:
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ATLANTIS COMMUNITY, INC.
NEEDS ASSESSMENT
INTERVIEW SCHEDULE
AUGUST 1976

First, I would like to thank you for setting up this interview with us. Let me just briefly review what this survey is all about. The Atlantis Community is an organization dedicated to increasing the independence of the physically disabled. This survey is designed to help Atlantis learn exactly what are the needs of the disabled so that we might plan programs to benefit them. So, you can see that the information you provide is is very important.

However, everything you tell me will be held in the strictest confidence, and no one but myself and the project director could know whose answers these are. Still, if any of the questions I ask you are questions you would rather not answer, for whatever reason, please don't feel you have to answer them.

If you wish, we would be glad to provide you with a written summary of the survey results later when they are compiled.

So, unless you have any questions about what we're doing, why don't we get right into the questioning...PAUSE TO SEE IF THE RESPONDENT DOES HAVE ANY QUESTIONS; FIRST ANSWER THOSE TO THE BEST OF YOUR ABILITY BEFORE STARTING THE INTERVIEW.

☐ RESPONDENT WISHES COPY OF SUMMARY REPORT.

Conducted by:

Social Change Systems, Inc.
1459 Ogden St at Colfax
Denver Colorado 80218
(303) 832 3526

1 ____
2 ____
3 ____

THIS FIRST SECTION CONTAINS JUST A FEW STRAIGHTFORWARD QUESTIONS - THINGS LIKE YOUR AGE, MARITAL STATUS, PLACE OF RESIDENCE, AND SO FORTH... 4 I

1. What is your age? __________ Sex Fe M (BY OBSERVATION) 5 ____

2. ASK ONLY IF UNCERTAIN: How do you classify yourself in terms of racial or ethnic background? An Bl Ch AI Or Ot 6 ____

3. What is your marital status? Si M Se W D LT 7 ____

4. IF PRIVATE RESIDENCE: Do you own or rent this house?
___Own ___Rent ___Parents own ___Parents rent ___Other

5. IF NURSING HOME/INSTITUTION, NOTE AND RECORD:
___Public ___Private non-profit ___Private proprietary 8 ____

6. Have you ever been institutionalized? ___Yes ___Unsure ___No
IF YES, When and for how long? ______________________________
______________________________ 9 ____

7. RECORD: Respondent's address ______________________________

OKAY. THIS NEXT SECTION DEALS WITH YOUR DISABILITY - WHAT IT IS, HOW YOU CONTRACTED IT, AND SO FORTH...

1. What is your physical disability? ______________________________ 10 ____
______________________________ 11 ____

2. How severe is your disability? ______________________________ 12 ____

3. When did your disability begin? ______________________________ 13 ____

4. Was there any special situation that brought about your disability?
______________________________ 14 ____

5. Did you move to the Denver area specifically for better medical care, services, or family assistance? ___Yes ___Unsure ___No 15 ____
When? ______________ 16 ____

6. Do you need an attendant? ___Yes ___No

7. Do you have one now? ___Yes ___No ___N/A 17 ____
IF YES, How is he/she paid for? ______________________________ 18 ____

8. Is the attendant a family member? ___Yes ___No ___N/A

9. Is he/she a live-in attendant? ___Yes ___No ___N/A 19 ____

10. At what times each day do you need this attendant?
Sun ______________ Thurs ______________ 20 ____
Mon ______________ Fri ______________ 21 ____
Tues ______________ Sat ______________ 22 ____
Wed ______________ ___N/A

11. What's been your general experience with regard to attendants? (PROBES: TURNOVER, RELIABILITY, MANAGEMENT?)

____ 23 ___

12. Which would you prefer? ___to manage your own attendant, or
___N/A ___to have someone else manage your attendant? 24 ___

13. Would you be interested in a short course on training and managing attendants? ___Yes ___Unsure ___No 25 ___

I'D LIKE TO TURN NOW TO THE MATTER OF THE MEDICAL CARE YOU ARE RECEIVING...

1. First of all, what kinds of medical care or treatment are you involved in?

___Regular treatment by a physician for your disability
___Physical therapy
___Occupational therapy
___Other kinds of rehabilitation
___Other ( )
___None

26 ___
27 ___

2. How is your medical care generally paid for? ____

____ 28 ___

3. If you are on prescription drugs, how are they paid for? ___N/A

____ 29 ___

4. Do you use over-the-counter, non-prescription supplies on a regular basis?
___Yes ___Unsure ___No

IF YES, How are they paid for? ____ 30 ___

For each of the following kinds of health care, would you tell me first if you are receiving satisfactory care or not, and then, what problems, if any, you have experienced in obtaining good health care.

	Satis.	Not Satis.	N/A	Problems	
5. Dental care	___	___	___	________________	31 ___
6. Eye care	___	___	___	________________	32 ___
7. Foot care	___	___	___	________________	33 ___
8. Hearing aid care	___	___	___	________________	34 ___

9. Overall, how satisfied are you with the health care you are receiving?

Very satisfied	Satisfied	Undecided	Dissatisfied	Very dissatisfied	
1	2	3	4	5	35 ___

IF 4 OR 5, What would be needed for you to receive better health care, or what would you rearrange or redesign if you could?

____

____ 36 ___

____ 37 ___

I'D LIKE TO ASK YOU NOW ABOUT SOME SPECIAL EQUIPMENT THAT PERHAPS YOU USE OR MIGHT NEED...

For each item that I read off, would you please tell me if it is something you need, then whether or not you have one now, then if you are satisfied with it or not, and finally, what problems, if any, you have with it.

	Need?	Have?	Satis?	Problems?	
1. Prosthetic equipment or orthopedic appliances (eg. splints, braces)	___	___	___	___	38 ___ 39 ___
2. Wheelchair	___	___	___	___	40 ___ 41 ___
3. Motorized wheelchair	___	___	___	___	42 ___
4. Transfer equipment (eg. trapeze, bathtub lift)	___	___	___	___	43 ___ 44 ___ 45 ___
5. Specially equipped car or other motorized vehicle	___	___	___	___	46 ___ 47 ___
6. Seeing eye dog or white cane	___	___	___	___	48 ___ 49 ___
7. Hearing aid	___	___	___	___	50 ___ 51 ___
8. Speech aids (voice box, communications board)	___	___	___	___	52 ___ 53 ___
9. Respiratory aids	___	___	___	___	54 ___ 55 ___
10. Other ( )	___	___	___	___	56 ___ 57 ___

11. Have you ever thought about some device or equipment that would help you, but which hasn't yet been invented or manufactured? ___Yes ___No

IF YES, Could you describe it? ___________________________ 58 ___

___________________________ 59 ___

12. Is there any make-shift or home-made device or equipment that you have put together yourself? ___Yes ___No 60 ___

IF YES, INSPECT LATER & DESCRIBE ___________________________ 61 ___

____

EDUCATION - WHAT KIND YOU'VE HAD AND HOW GOOD IT WAS - IS THE NEXT THING I WOULD LIKE TO ASK YOU ABOUT...

1. How much education have you completed?

___Less than 8th grade
___Finished 8th grade
___Some high school
___High school graduate/GED
___Some vocational school

___Vocational school graduate
___Some college
___College graduate
___Some graduate work
___Graduate degree

62 ___
63 ___
64 ___

IF VOC SCHOOL OR MORE, What was your major? ___________________________ 65 ___

2. Have you attended any school since you have been disabled? ___Yes ___No 66 ___

IF YES, I'D LIKE TO ASK YOU A FEW QUESTIONS ABOUT EACH SCHOOL...

School	Level	Regular/Special	In terms of what you learned there	As place for disabled to go to school

67 ___
68 ___
69 ___
70 ___
71 ___
72 ___
73 ___
74 ___
75 ___
76 ___
77 ___
78 ___
79 ___
80 ___
1 ___
2 ___
3 ___
4 2
5 ___
6 ___

FOR EACH SCHOOL:
What was the name of the school? (WRITE IN ABOVE)
What level was that - elementary (E), secondary (S), college (C), or post-graduate school (G)? USE (V) FOR vocational.
Was that a regular (R) or special education (S) school?
How would you rate that school "in terms of what you learned there" and "as a place for a disabled person to go to school"? USE (E) for excellent, (G) for good, (F) for fair, and (P) for poor. USE (U) IF RESPONDENT IS UNSURE.

3. Do you prefer attending classes with...
___Mostly disabled students
___Mostly able-bodied students
___A mix
___No preference
___Don't want to go to school 7 ___

4. Are you attending school now? ___Yes ___No 8 ___

IF YES, Where, level, program, how paid? ___________________ 9 ___ 10 ___

IF YES, Is there any special equipment or help you make use of?
___________________ 11 ___

5. Is there anything else you would need to enable you to continue your education? ___________________
___________________ ___N/A 12 ___

THIS NEXT SECTION DEALS WITH YOUR FINANCIAL SITUATION. LET ME JUST SAY AGAIN THAT YOU DON'T HAVE TO ANSWER ANY QUESTION THAT YOU DON'T WANT TO...

1. What are all the sources of income you have, and the monthly take-home amount from each source?
(IF RESPONDENT WOULD RATHER NOT LIST ALL SOURCES, ASK FOR TOTAL AMOUNT.)

		TOTAL	

13 ___
14 ___
15 ___
16 ___
17 ___
18 ___
19 ___
20 ___
21 ___

2. How well do you get by on that amount?
___Very well ___Adequately ___Unsure ___Not well ___Not making it 22 ___

IF NOT MAKING IT/NOT WELL, How much more would you need to get by adequately each month? ________ 23 ___

3. Do you have anyone who assists you in managing your finances? ___Yes ___No 24 ___

IF YES, Who, to what extent, etc? ________

________ 25 ___

4. Could you estimate your monthly expenses, the ones that you pay out of your pocket, for... 26 ___ 27 ___ 28 ___

_____Medical care _____Equipment/supplies _____Recreation 29 ___ 30 ___

_____Medicine _____Transportation _____Rent/house payment 31 ___ 32 ___

_____Attendant care _____Food _____Utilities 33 ___

_____Other major items (________) 34 ___ 35 ___

LET'S TURN NOW TO THE SUBJECT OF EMPLOYMENT...

1. Are you currently employed? ___Yes ___No ___Don't want to be

IF YES, is that ___full-time or ___part-time? 36 ___

IF YES, What kind of work do you do? ________ 37 ___

2. What kinds of job skills do you have? ________ 38 ___
(IF RESPONDENT LISTS SEVERAL, PROBE FOR PRIMARY ONE/S.)

3. ASK ONLY IF NOW WORKING: How satisfied are you with your present work situation? ___Very satisfied ___Unsure ___Dissatisfied
___Satisfied ___Very dissatisfied 39 ___

Elaborate ________ 40 ___

4. Could you briefly describe the different jobs you've had and when?
(HOW FAR BACK YOU TRACE DEPENDS UPON RESPONDENT'S PARTICULAR SITUATION.)

Dates	Job	Pay per mo
________	________	________
________	________	________
________	________	________
________	________	________

41 ___
42 ___
43 ___
44 ___
45 ___
46 ___

5. Have you ever received specific vocational rehabilitation? ___Yes ___No 47 ___

IF YES, When, where, for what, outcomes, etc? ________ 48 ___

____

6. Do you presently feel that you are being discriminated against or being treated unfairly in terms of employment? ___Yes ___Unsure ___No ___N/A

IF YES, Elaborate ________ 49 ___

7. Have you experienced this before? ___Yes ___Unsure ___No

IF YES, Elaborate ________________________________ 50 ___

8. What does work mean to you - why do you (OR don't you) want to work?

________________________________ 51 ___

________________________________ 52 ___

9. ASK ONLY IF RESPONDENT WANTS TO WORK BUT IS NOT NOW WORKING
Why is it that you
are not working now? ________________________________ 53 ___

DON'T ASK NEXT THREE QUESTIONS OF RESPONDENTS WHO DON'T WANT TO WORK.

10. What kind of work would you like to be doing?

________________________________ 54 ___

11. Would you prefer to work...

___With others	___With other physically disabled people mainly
___Alone	___With able-bodied people mainly
___No preference	___With a mix of people
	___No preference

55 ___
56 ___

12. What special equipment or help would you need to do the kind of work you want to do?
____

________________________________ 57 ___

Is such equipment or help available to you now? ___Yes ___Unsure ___No 58 ___

THIS NEXT SECTION WE'LL MOVE TO NOW CONCERNS THE ACTIVITIES OF DAILY LIVING...

I'm going to read you a list of activities that people often do each day. For each one, would you tell me if it's something that you can do by yourself. If it's something you have trouble doing by yourself, then let's explore what might allow you to do it more easily. GIVE RESPONDENT CARD. Let me know if any of these changes would allow you to do that activity more easily.

	Trouble doing by yourself	What would allow you to do it more easily	
1. Getting in & out of bed	Y N N/A	________________	59 ___ 60 ___
2. Preparing meals & washing dishes	Y N N/A	________________	61 ___ 62 ___
3. Light house cleaning (eg. sweep, mop)	Y N N/A	________________	63 ___ 64 ___
4. Heavy house cleaning (eg. move furniture)	Y N N/A	________________	65 ___ 66 ___
5. Shopping for groceries & other items	Y N N/A	________________	67 ___ 68 ___
6. Doing the laundry	Y N N/A	________________	69 ___ 70 ___

7

7. Using the telephone Y N N/A ____________ 71 ___ 72 ___

8. Operating the TV, radio, stereo Y N N/A ____________ 73 ___ 74 ___

9. Admitting visitors to your home Y N N/A ____________ 75 ___ 76 ___

10. Dressing Y N N/A ____________ 77 ___ 78 ___

11. Bathing, washing, grooming Y N N/A ____________ 79 ___ 80 ___

1 ___
2 ___
3 ___
4 3

12. Putting on artificial brace or limb Y N N/A ____________ 5 ___

13. Drinking Y N N/A ____________ 6 ___ 7 ___

14. Eating Y N N/A ____________ 8 ___

15. Getting in or out of chair Y N N/A ____________ 9 ___ 10 ___

16. Getting on or off toilet Y N N/A ____________ 11 ___

17. Getting in or out of shower Y N N/A ____________ 12 ___ 13 ___

18. Toilet activities (bowel, bladder, catherer) Y N N/A ____________ 14 ___ 15 ___

19. Walking 50 yds on level Y N N/A ____________ 16 ___ 17 ___

20. Walking up/down flight of stairs Y N N/A ____________ 18 ___ 19 ___

21. Lifting/carrying 10 lbs Y N N/A ____________ 20 ___ 21 ___

22. Propelling/pushing manual wheelchair Y N N/A ____________ 22 ___ 23 ___

24 ___

THIS NEXT SECTION DEALS WITH THIS BUILDING, THE SPACE WHERE YOU LIVE, AND HOW WELL OR POORLY IT IS SUITED TO YOUR NEEDS... 25 ___ 26 ___

1. What architectural barriers (physical barriers to your movement) do you experience in and around your home?
(BRIEFLY JOT DOWN USUAL ONES; PROBE FOR UNUSUAL, UNIQUE ONES.)

____ 27 ___

____ 28 ___

2. Have you made, or have you had others make, any alterations in this building to remove such barriers? ___Yes ___Unsure ___No 29 ___

IF YES, INSPECT LATER, RECORD, PHOTOGRAPH ____________________ 30 ___

____ 31 ___

IF YES, Who made the changes? ____________________ 32 ___

IF YES, Who paid for the changes? ____________________ 33 ___

IF NO, How come the changes weren't made? ____________________

____ 34 ___

3. Are there any particular ways you've found to gain greater mobility or physical independence that you are especially proud of? ___Yes ___No

IF YES, What is it? ________________________________ 35 ___

____ 36 ___

4. As a result of your disability, have you moved to another place so that you could get around better? ___Yes ___Unsure ___No

IF YES, What was the problem & cost incurred? ________________ 37 ___

____ 38 ___

5. How satisfied are you with the physical aspects of your living arrangements?
___Very satisfied ___Unsure ___Dissatisfied
___Satisfied ___Very dissatisfied 39 ___

IF DISSATISFIED, Why have you not moved? ________________

____ 40 ___

PREFACE NEXT THREE QUESTIONS WITH: If you were to move now...

6. What kind of area would you most like to live in?
___The central part of the city ___Suburbs ___Farther out from the city 41 ___

7. In what kind of building would you prefer to live?
___Single family detached house ___Mobile home or trailor
___Townhouse or duplex ___High-rise apartment building
___Other (____________________) 42 ___

8. Would you prefer to live...
___Alone ___Mostly disabled people ___A mix of people 43 ___
___With others ___Mostly able-bodied ___No preference 44 ___
___No preference

9. IF RESPONDENT IS IN A NUSRING HOME/INSTITUTION:
Would you prefer to live independently, if attendant care could be arranged?
___Yes ___Unsure ___No 45 ___

OKAY, SO MUCH FOR SPACES INSIDE YOUR HOME. NOW, LET'S TALK ABOUT SPACES OUTSIDE THIS BUILDING...

1. What are some of the barriers to your movement that you encounter on a regular basis outside your home?
(BRIEFLY JOT DOWN USUAL ONES; PROBE FOR UNUSUAL, UNIQUE ONES.)

____ 46 ___

____ 47 ___

2. Which of these barriers is the one you would like to correct first?

____ 48 ___

GETTING TO AND FROM SOME OF THOSE PLACES CAN BE A HASSLE. LET ME NOW ASK YOU SOME QUESTIONS ABOUT TRANSPORTATION...

1. What trips around the city or metro area do you regularly have to make? Could you tell me, for each trip, where you start from, your destination, and how you usually get there.

Origin	Destination	Usual Mode

49 ___
50 ___
51 ___
52 ___
53 ___
54 ___
55 ___
56 ___

About how often do you use the following kinds of transportation?

	Never	<once month	Once/ month	2-3x/ month	Once/ week	2x/ week	3-6x/ week	Daily	Daily+	
2. Regular RTD bus										57 ___
3. RTD Handiride										58 ___
4. Ambulance cab										59 ___
5. Regular taxicab										60 ___
6. Your own car										61 ___
7. Get a ride from friend/relative										62 ___
8. Carpool										63 ___
9. Ride from agency or organization										64 ___
10. Other										65 ___

11. What transportation, if any, is paid for by some agency or program?

____ 66 ___

Which agency? ___________________________________ 67 ___

12. What has been your experience with the RTD Handiride?

___Haven't heard of it
___Have heard of it, but don't want or need service
___Have heard of it, want it, but haven't applied
___Have applied, but was rejected
___Am being served 68 ___

IF REJECTED, What reason were you given? ________________ 69 ___

13. What do you think of the Handiride service? ________________________ 70 ___

____

14. Can you drive? ___Yes ___No ___N/A

IF NO, Could you drive if you had proper equipment and training?
___Yes ___Unsure ___No 71 ___

15. Do you have any transportation needs that aren't being met? ___Yes ___No

IF YES, What are they? ______________________________ 72 ___

I'D LIKE TO TURN NOW TO THE SUBJECT OF SOCIALIZING - WHAT KINDS OF FRIENDS AND ASSOCIATES YOU HAVE...

1. Do you feel you have enough opportunity to meet people? 73 ___
   ___Yes ___Unsure ___No

2. Are most of the people you associate with
   ___Disabled ___Able-bodied ___A mix 74 ___

3. Do you prefer to be around
   ___Disabled persons ___Able-bodied persons ___A mix ___No preference 75 ___

4. Do you feel that some of your able-bodied acquaintances feel uncomfortable
   around disabled people? ___Yes ___Unsure ___No 76 ___

5. Do you feel that some of your disabled acquaintances feel uncomfortable
   around able-bodied people? ___Yes ___Unsure ___No 77 ___

FROM SOCIALIZING, LET'S MOVE ON TO RECREATION...

1. What kinds of recreation do you take part in most often, including activities 78 ___
   you do at home as well as those you do elsewhere. Could you start with your 79 ___
   most frequent activity, then your 2nd most frequent activity, and so on. 80 ___
   1. ___________ 3. ___________ 5. ___________ 1 ___
   2. ___________ 4. ___________ 2 ___
   3 ___
   4 4

2. Do you get to do these activities as often as you would like for the most 5 ___
   part? ___Yes ___Unsure ___No 6 ___

3. What are some other recreational activities that you think you could do with 7 ___
   either attendant help or special equipment or some other form of assistance?
   8 ___
   9 ___

Activity	What would be needed
___________	___________
___________	___________
___________	___________
___________	___________

10 ___
11 ___
12 ___
13 ___
14 ___
15 ___

4. How would you rate recreational opportunities that are available to you and
   other disabled persons in the Denver area?
   ___Very good ___Good ___Unsure ___Poor ___Very poor 16 ___
   IF (VERY) POOR, What do you think can be done to improve the situation?
   ____
   ___________ 17 ___

THERE ARE MANY OTHER THINGS ONE MIGHT BE INVOLVED IN AROUND THE CITY. LET ME ASK YOU ABOUT SOME OTHER OUTSIDE ACTIVITIES...

About how often do you get out for the following purposes? In each case, could you also tell me if you have enough opportunity to do these activities.

		Never	4x/year	4-10x/year	Once/month	2-3x/month	Once/week	2x/week	Daily	Enough Opportunity	
1.	Shopping										18 ___
2.	Movies/theatre/concerts										19 ___
3.	Sports events										20 ___
4.	A trip to the park										21 ___
5.	A trip to the mtns or other distant rec area										22 ___
6.	Public or community meeting/event										23 ___
7.	Library/museum										24 ___
8.	Church										25 ___
9.	Visit friends/relatives										26 ___

10. Are there other community activities you would like to be involved in?
___Yes ___Unsure ___No

IF YES, What are they? ________________________________ 27 ___

IF YES, What could be done to make it more possible for you to do that?

________________________________ 28 ___

THIS NEXT SECTION HAS SEVERAL QUESTIONS ABOUT YOUR FAMILY. IF ANY OF THESE ARE QUESTIONS YOU WOULD RATHER NOT ANSWER, JUST SAY SO...

1. Do you see your family as frequently as you wish? ___Yes ___Unsure ___No 29 ___

2. Are your relations with them as good as you would like? ___Yes ___Unsure ___No 30 ___

3. Are you dependent, in any way, on your family? ___Yes ___Unsure ___No 31 ___

IF YES, In what way? ________________________________

________________________________ 32 ___

4. Is your family dependent, in any way, upon you? ___Yes ___Unsure ___No 33 ___

IF YES, In what way? ________________________________

________________________________ 34 ___

(IF RESPONDENT IS RESPONSIBLE FOR CARING FOR SOMEONE ELSE, HOW IS THAT MANAGED?)

5. Do you feel your disability has contributed to any change, one way or the other, in your family or marriage? ___Yes ___Unsure ___No 35 ___

IF YES, Describe ________________________________

________________________________ 36 ___

6. Is there anything that could be done, with regard to your disability, that would improve or enrich your family or marriage? ___Yes ___Unsure ___No 37 ___

IF YES, Describe ________________________________ 38 ___

MOVING ON NOW, I WOULD LIKE TO ASK YOU A SERIES OF QUESTIONS ABOUT THE RESOURCES THAT MIGHT BE AVAILABLE TO YOU...

1. How informed do you feel about the kinds of assistance and resources that are available to disabled persons?
___Very informed ___Unsure ___Not very informed
___Informed enough ___Very uninformed 39 ___

2. How knowledgeable do you feel about your disability and the medical care of it? ___ 40 ___

3. Have you ever been instrumental in helping another disabled person obtain some kind of assistance to which they were entitled?
___Yes ___Unsure ___No
IF YES, Describe ___
___ 41 ___

What has been your experience with each of the following programs or services?

	have not heard	heard, not eligible	heard, not needed	heard, not worth it	heard, want, not applied	applied, no response	applied, rejected	being served	other	
4. Vocational Rehabilitation	1	2	3	4	5	6	7	8	9	42 ___
5. General Assistance	1	2	3	4	5	6	7	8	9	43 ___
6. Homecare Allowance	1	2	3	4	5	6	7	8	9	44 ___
7. Colo Supplement to SSI	1	2	3	4	5	6	7	8	9	45 ___
8. Aid to the Needy Disabled	1	2	3	4	5	6	7	8	9	46 ___
9. Aid to Dependent Children	1	2	3	4	5	6	7	8	9	47 ___
10. Homemaker Services	1	2	3	4	5	6	7	8	9	48 ___
11. Food Stamps	1	2	3	4	5	6	7	8	9	49 ___
12. Rent Subsidy	1	2	3	4	5	6	7	8	9	50 ___
13. Social Security	1	2	3	4	5	6	7	8	9	51 ___
14. Social Security Disability	1	2	3	4	5	6	7	8	9	52 ___
15. Medicare for SS Disability	1	2	3	4	5	6	7	8	9	53 ___
16. Supplementary Security Inc	1	2	3	4	5	6	7	8	9	54 ___
17. Medicaid	1	2	3	4	5	6	7	8	9	55 ___
18. Workmen's Compensation	1	2	3	4	5	6	7	8	9	56 ___
19. Veteran's Benefits	1	2	3	4	5	6	7	8	9	57 ___
20. Self-Support Plan	1	2	3	4	5	6	7	8	9	58 ___
21. Help from private agencies	1	2	3	4	5	6	7	8	9	59 ___

22. Do you feel you've gotten the runaround when seeking some aid or service for yourself? ___Yes ___Unsure ___No 60 ___
IF YES, Describe situation, approach, outcome ___
___ 61 ___

23. Do you have a regular caseworker? ___Yes ___Unsure ___No 62 ___

24. Does this person seem to know about all possible resources for you? ___Yes ___Unsure ___No 63 ___

64 ___

25. Are you satisfied with this person? ___Yes ___Unsure ___No

26. Is there any service or program for which you believe there presently is no source? ___Yes ___Unsure ___No 65 ___

IF YES, What is it? ______________________________

______________________________ 66 ___

TELL RESPONDENT WE WILL GET BACK TO HIM/HER WITH AN ANSWER AS SOON AS POSSIBLE.

MANY DIFFERENT EFFORTS HAVE BEEN AND ARE BEING MADE TO IMPROVE THE SITUATION OF THE DISABLED. I'D LIKE TO GET YOUR THOUGHTS ABOUT WHAT SHOULD BE DONE...

1. How would you generally describe the situation of disabled people in this society? ______________________________ 67 ___

______________________________ 68 ___

2. Do you think of yourself as part of a minority group that is somehow stigmatized or discriminated against? ___Yes ___Unsure ___No 69 ___

IF YES, What's your reaction to being in that position?

______________________________ 70 ___

3. For purposes of governmental planning of such functions as housing and social services, the disabled should be placed in the same category as the elderly? ___Agree ___Unsure ___Disagree 71 ___

4. Are you a member of any group organized to deal with problems that the disabled have? ___Yes ___Unsure ___No 72 ___

5. What is your greatest frustration or area of unmet goals as a disabled person? ______________________________

______________________________ 73 ___

6. What is your greatest satisfaction or personal accomplishment as a disabled person? ______________________________

______________________________ 74 ___

7. Have you ever been involved in an effort to change some law, policy, or other situation with regard to the disabled? ___Yes ___Unsure ___No 75 ___

IF YES, Describe situation, approach, outcome ______________________________

____

______________________________ 76 ___

8. Would you like to be more active in working on issues of concern to the disabled? ___Yes ___Unsure ___No

IF YES, In what way ______________________________ 77 ___

9. Do you think that the disabled themselves are working hard enough to improve their situation? ___Yes ___Unsure ___No 78 ___

79 ___

80 ___

10. How would you label yourself politically?
___Conservative ___Middle-of-roader ___Liberal ___Radical 1 ___

2 ___

11. Do you regularly vote? ___Yes ___Unsure ___No ___Not registered 3 ___

IF NO/NOT REG., Why is that? 333 ______________________________ 4 ___

5 ___

14

12. What approaches do you feel should be used to improve the situation of the disabled? (E.G. LETTER-WRITING, DEMONSTRATING, LOBBYING, ETC.)

______________________________ 6 ___

______________________________ 7 ___

13. Are you satisfied with your present life style? ___Yes ___Unsure ___No 8 ___

14. Looking back over the last year or so, do you feel you have become ___more or ___less independent in your life style? ___Can't say ___N/A 9 ___

15. Do you feel the need for some assistance in developing the ability to live more independently than you now live? ___Yes ___Unsure ___No 10 ___

THIS FINAL SECTION HAS A NUMBER OF PERSONAL QUESTIONS THAT MAY OR MAY NOT BE RELEVANT TO YOUR OWN EXPERIENCE. SO IF THERE ARE ANY QUESTIONS YOU DON'T FEEL LIKE ANSWERING, FEEL FREE NOT TO ANSWER THEM, OKAY?

1. How has your disability affected your outlook on life? ______________________________

______________________________ 11 ___

2. Are there some emotions you periodically feel that you think are attributable to your disability? ___Yes ___Unsure ___No
(EG. ANGER, INSIGNIFICANCE, CONFIDENT, GUILT, ETC.)

IF YES, What are they? ______________________________ 12 ___

______________________________ 13 ___

3. When you are feeling down in the dumps, what do you generally do about it - is there someone you can talk to? ______________________________

____

______________________________ 13 ___

4. Is that arrangement adequate, or do you feel the need for some (OR other) counseling? ___Adequate ___Unsure ___Inadequate ___N/A 14 ___

5. Are you currently receiving any professional counseling?
___Yes ___Unsure ___No

IF YES, Is that person ___disabled or ___able-bodied? 15 ___

IF YES, Where, from whom? ______________________________ 16 ___
(ONLY WANT TYPE PERSON - PSYHIATRIST, MINISTER, SOCIAL WORKER, ETC. & KIND OF AGENCY OR PROGRAM.)

6. What kind of counselor would you prefer?
___Disabled ___Male
___Able-bodied ___Female
___No preference ___No preference 17 ___

7. Would you like to have a chance to discuss your concerns with other disabled persons? ___Yes ___Unsure ___No 18 ___

8. Have you ever felt a need for sexual counseling? ___Yes ___Unsure ___No 19 ___

IF YES, Have you received adequate counseling on those occasions?
___Yes ___Unsure ___No 20 ___

9. Have you ever made an attempt at suicide? ___Yes ___Unsure ___No

IF YES, Were you able to get some adequate counseling at that time? 21 ___
___Yes ___Unsure ___No

ASK: Are there any other comments you would like to make? RECORD ON OTHER SIDE.

FINANCIAL INCOME AND EXPENDITURES
APPENDIX

INCOME BENEFITS

1. SOCIAL SECURITY DISABILITY INSURANCE (DI)
2. RAILROAD RETIREMENT, DISABILITY AND SURVIVORS ANNUITIES (RR)
3. SUPPLEMENTAL SECURITY INCOME (SSI)
4. SELF-SUPPORT PLAN
5. VOCATIONAL REHABILITATION (VR)
6. AID TO FAMILIES WITH DEPENDENT CHILDREN (AFDC)
7. AID TO THE NEEDY AND DISABLED:
   COLORADO SUPPLEMENTAL AND HOME CARE ALLOWANCE (AND)
8. GENERAL ASSISTANCE
9. FOOD STAMPS PROGRAM
10. WORKMENS COMPENSATION INSURANCE
11. SECTION VIII RENT SUBSIDY

MEDICAL BENEFITS

1. MEDICARE
2. MEDICAID
3. SPENDDOWN-MEDICAID
4. MEDICAL INDIGENCY PROGRAM

NAME OF PROGRAM: Social Security (SS) - Disability Insurance (DI)

SOURCE OF FUNDING: The basic idea of Social Security is a simple one. During working years employees, their employers, and self-employed people pay Social Security contributions on all wages up to $15,300 in 1976. This amount will increase automatically in years to come. Through 1977 employees and employers each pay 5.85 percent on the employee's wages. The total rate for self-employed people is 7.90 percent.

ADMINISTRATION: Social Security DI Benefits - Disability Insurance benefits are distributed by the Social Security administration.

ELIGIBILITY: If a worker becomes disabled before 24, he needs work credits for 1 1/2 years of work in 3 years before he became disabled. If you're between 24 and 31, you must have credit for half the time between your 21st birthday and the time you became disabled.

To be considered disabled under the Social Security law you must have a physical or mental condition which prevents you from doing any substantial gainful work, and is expected to last (or has lasted) for at least 12 months, or is expected to result in death.

The medical evidence from your physician or other sources will show the severity of your condition and the extent to which it prevents you from doing gainful work.

Dependents are eligible for SS benefits on a parent's retirement, disability or death. Monthly payments can be made to unmarried children under 18 (or 22 if full-time students), unmarried son or daughter 18 or over who was severely disabled before 22 and continues to be disabled, widow or dependents widower 60 or older, widow, widower, or surviving divorced mother if caring for a worker's child under 18 (or disabled) who is getting a monthly benefit based on the earnings of the deceased worker, widow, or dependent widower 50 or older who becomes disabled not later than 7 years after workers death, or in case of a widow, within 7 years after she stops getting checks as a widow caring for a worker's children, a disabled surviving divorced wife 50 or older if the marriage lasted 20 years or more (Note: Step-children, adopted children, and in certain circumstances, grandchildren may qualify on a workers benefit record).

BENEFITS: Social Security - Disability Insurance Benefits - The amount of monthly Disability Insurance benefits a disabled worker or his dependents will receive, depends on how many work credits he has and how much money he has paid into his Social Security record at the time of his disability. One example, a young worker became disabled in 1975 at age 20 or younger and had average covered yearly earnings of $8,400 over two years. His disability benefits would be $410.70 a month. If he had a wife and two children, family benefits would be $718.70 a month. Dependents of a retired, disabled or deceased worker receive 75% as much as the eligible parent does, if the parent is deceased, 50% if parent is alive.

The minimum Social Security Disability Insurance benefits for a family is $93.82, and the maximum is $834.80 per month in 1976. The lump-sum payment made at a workers death is $255.00; it is paid to his dependents for funeral expenses.

APPLICATION PROCEDURES: When you apply for Social Security, Disability Insurance benefits, you should have with you, your own Social Security card or a record of your number (if your claim is on another person's record, you'll need that person's card or a record of the number), proof of age; a birth certificate or a baptismal certificate made at or shortly after birth if you have one.

Your marriage certificate if you're applying for wife's or widow's benefits. Your children's birth certificate if you're applying for them. Your W-2 Form for the previous year; a copy of your last Federal income tax return if you're self-employed.

When you apply for Disability Insurance benefits, the SSA office will send your claim to a disability determination services office in your State--usually associated with the vocational rehabilitation agency. There a decision will be made as to whether you are disabled under the SSA law.

When benefits are payable, no benefits are paid for the first 5 months of disability; Disability Insurance benefits start the 6th month of your disability. A person disabled before 22 may get benefits beginning with the month a parent starts receiving retirement or disability benefits or the month an insured parent dies. There is no 5 month waiting period.

PERMISSIBLE ADDITIONAL EARNINGS: Earnings from interest, stocks, bonds, rent, etc., do not affect your Disability Insurance benefits. Only substantial gainful employment and self-employment will affect your Disability Insurance benefits. Under the SSA laws substantial gainful employment is $200.00 a month.

REASONS FOR TERMINATION: If you are receiving Disability Insurance benefits and you get a job, you are required by law to let the SSA know no matter how little your income might be. If you are severely disabled and you are employed earning $200.00 a month, SSA considers that to be substantial gainful employment and you would lose your Disability Insurance benefits.

There is a trial work period for disabled workers and persons disabled in childhood, in spite of their severe disability, who want to return to work. A 9 month trial work period to determine if the disabled person can earn a substantial gainful · employment. The individual will not lose his Disability Insurance benefits, unless, the SSA determines he can do gainful employment.

A disabled widow, disabled dependent widower, or disabled surviving divorced wife is not eligible for a trial work period. If she or he begins to do substantial gainful work, benefits will stop 3 months after the work begins.

If someone marries while receiving Disability Insurance benefits as a person disabled in childhood or as a disabled widow or widower, the benefits will stop.

NAME OF PROGRAM: Supplemental Security Income (SSI)

SOURCE OF FUNDING: The money to make SSI payments comes from general funds of the Treasury, personal income tax, corporation taxes, and other taxes.

ADMINISTRATION: The SSI administers the SSI program. SSI is not taken from SSA funds.

ELIGIBILITY: Basic eligibility condition, 65 or over, blind vision no better than 20/200 even with glasses. Disabled; a physical or mental impairment which prevents a person from doing any substantial work and which is expected to last at least 12 months or result in death.

Income:	Below $157.70 a month for an individual 236.60 a month for a couple
Resources:	$1500 for an individual $2250 for a couple

Not counting a home, car, person effects, household goods of reasonable value.

Disabled must accept vocational rehabilitation.

BENEFITS: Supplemental Security Income is the first federally administered cash assistance program in the country.

Through monthly payments, the program provides a floor of income for aged, blind, and disabled people who have little or no income resources.

The title - Supplemental Security Income - makes explicit that these payments, in most cases, supplement whatever income may be available from other sources, including Social Security benefits.

The basic Supplemental Security Income payment level is $157.70 a month for an individual and $236.60 a month for a couple. These payment levels will be automatically increased in the future according to the cost of living. Children under 18 can also apply for Supplemental Security Income benefits at any age, if they are disabled.

Under the law, states are required to supplement the Federal payments to recipients, when necessary, to maintain the level of assistance they received under the former State plans.

Supplemental Security Income operates under a Federal/State partnership, which allocates to each level of government those functions it is best able to perform. On the national level, the Federal government administers the program through the SSA. It makes the basic payments to recipients, determines eligibility of applicants, and maintains a master record of beneficiaries. On the local level, the states, in addition to supplementing the Federal payments, provide Medicaid and social rehabilitation services. If a person eligible for SSI payments is in a public or private health facility which receives substantial payments on his behalf under the Medicaid program, the amount of his SSI payments is reduced.

Since SSI can be reduced by other income, the applicant must, if advised by the SSA, apply for any other mony benefits due him. The SSA works with recipients and helps them get any other benefits which they are eligible.

The SSI definitions of disability and blindness generally match SSA's Disability Insurance definitions. Disabled applicants are referred to State agencies for possible rehabilitation services.

Resources: As said above, an individual may have resources of up to $1500; a couple $2250. Not all resources are counted.

A home with a market value of $25,000 or less ($35,000 or less in Alaska and Hawaii) is not counted. A car which has a retail value of $1200 or less or which is used for transportation to a job or to a place for regular treatment of a specific medical problem, personal effects or household goods with a total market value of $1500 or less are not counted.

Also excluded are property essential to self-support, certain community stocks held by natives of Alaska, and life insurance policies with a total face value of $1500 or less per person.

If a person's countable resources exceed the limit by a small amount, he may still qualify for SSI payments if he agrees to sell the excess assets within a specified time. This helps the person who owns property which is providing little or no income but which cannot be sold quickly at a fair price. Time limits for personal property to be disposed of is 6 months for real property and 3 months for personal property. SSI payments received pending the sale of the assets may have to be repaid out of the proceeds of the sale.

Disabled Children Under 18: A disabled child can apply for SSI benefits at any age. Someone representing the child must apply at a SSA office. For a child to receive SSI benefits it depends on; 1. How severely disabled the child is; 2. If the parents' income is low enough, then, if the child is eligible for SSI benefits, how much he will receive depends on his parents' income and how many other children there are in the household.

If a disabled child receiving SSI benefits is in a nursing facility, his SSI benefits will be $25 a month.

A child receiving SSI benefits does not receive the State Supplemental (AND).

Disabled 18 and over: If the person or the couple has retirement or other unearned income or income that is not from current earnings, such as SS-DI benefits, annuities, rents, interest, etc. $20 a month of this income is ignored, and the rest is deducted from the basic SSI amount, dollar or dollar. If the SSI recipient has no other earnings, s/he will receive the State Supplement.

Examples: An SSI recipient who has no other earned income.

SSI benefits	$167.80
CS / AND	17.20
Total monthly income	$185.00

An SS/DI recipient who receives monthly payments of $114.50.

Monthly DI benefits	$114.50	
Less $20	-20.00	
Countable income not from current earnings	$94.50	$94.50
Income from current earnings	None	None
Total countable income for the month		$94.50
Basic SSI amount for the month	$167.80	
Less total countable income	-94.50	
Monthly SSI income amount	$ 73.30	$ 73.30
SS/DI benefits is		114.50
Total monthly income will be		$187.80

Earnings from Current Work: If a person or couple has earnings from current work, $65 a month of it is ignored, then $1 is deducted from the basic SSI payment for each addition $2 of earnings. (If a person or couple has no other income apart from the SSI earnings, then $85 a month of earned income is exempted before the one-for-two rule applies.)

Monthly Work Income and Not Losing Your SSI Benefits; If your gross salary or net income from self-employment is

1. less than $140 per month, your work is not considered to be Substantial gainful activity
2. between $140 and $200 per month, your case will be reviewed individually and your work will generally not be considered to be substantial gainful activity
3. over $200 per month, your work will be considered as substantial gainful activity

Blind Exclusions: In addition to the income, blind recipients may exclude work related expenses. Expenses necessary to job performance such as transportation, adequate clothing, readers, braille writers, etc. The blind recipient who earns $145 a month and has $25 a month job related expenses can exclude a total of $130 a month. Example: If a blind person earns $145 a month. The first $65 is excluded from the $145 leaving $80, $1 for every $2 earned leaves $40 out of the $80, so, $65+$40+$25 for expenses = $130. SSI will only deduct $15 from your check.

APPLICATION PROCEDURES: A person applying at an SSA office for SSI benefits, will have to fill out a card giving the name of their doctor and the hospital they were in. The SSA will ask your doctor and the hospital to fill out a medical report on the severity of your disability. In some cases the SSA may ask for a birth certificate.

To Re-Apply for SSI: When a severely disabled person loses SSI benefits because of SGA, then loses her/his job, and can't get another job because of her/his disability. S/he may be accepted for SSI benefits again. The SSA may ask for another medical and physical report on that person.

PERMISSIBLE ADDITIONAL EARNINGS: The following income is not included in determining the amount of income:

1. $20 a month of earned or unearned income such as Social Security benefits, annuities, rent, interest, etc. (but not based on need);
2. $65 a month of earned income (wages and/or net earnings from self-employment) plus one-half of the earned income over $65;
3. Refund of taxes paid on real property or on food purchases;
4. Regular cash payments by a State or local political subdivision which are based on need;
5. Tuition and fees of grants, scholarships, and fellowships;
6. Home-grown produce consumed by the individual and his family;
7. Irregular or infrequent earned income if it totals no more than $30 in a calendar quarte
8. Irregular or infrequent unearned income if it totals no more than $60 a quarter;
9. Foster care payments for a child who is not receiving income payments but who has been placed in the recipients household by an approved agency;
10. One-third of child support payments received by an eligible child from an absent parent;
11. Earnings (up $1200 a quarter, but not more than $1620 a year) of an unmarried student under 22;
12. Income necessary for fulfillment of an approved plan to achieve self-support established for a blind or disabled person;
13. Work expenses for an eligible person who is blind.

REASONS FOR TERMINATION: When a person employed or self-employed is earning SGA. If a person recovers from a disability. If a person eligible for DI benefits on another person's SS, and the amount is over the State maximum level of income. Refusal to dispose of excess assets after payments have started means the recipient will be found ineligible and will have to return the payments s/he's received. A person marries and the person s/he married has a substantial income.

NAME OF PROGRAM: Supplemental Security Income (SSI) Plan for Self-Support (PSS)

SOURCE OF FUNDING: Income and/or resources.

ADMINISTRATION: Social Security Administration

ELIGIBILITY: Recipients of SSI, and individuals whose disabilities meet the SSI requirements of disability but their income and/or resources are above SSI eligibility. An individual whose income and/or resources are above SSI eligibility can write up a PSS and if approved by the SSA the individual would then be eligible for SSI.

BENEFITS: Who: New Applicants or Continuing Recipients of SSI

Purpose: To exclude a portion of income and/or resources to become or to continue to be eligible for SSI

How: Excluded income must be utilized to pursue a Vocational Goal within a specific Time Period

The purpose of the PSS is to permit a handicapped person to receive income and accumulate resources beyond amounts allowable for other recipients so that the person may receive training or purchase equipment necessary to become self-supporting. Where all requirements of this provision are met, income from any source, whether earned or unearned, is excluded and allowed to accumulate or be disbursed to the extent specified in the individual's plan.

Funds, Equipment, Tools or Automobile: If a person receives funds, equipment, tools, or an automobile from an agency, a relative or a friend, that would enable the person to be trained for employment or to be employed, that individual could write up a plan for self-support and if SSA approved the plan, these funds or resources would not be deducted from SSI payments.

Criteria for a PSS

Must be in Writing
1. Can be written by anyone
2. Must include specific information

Must have Vocational Objective
1. Must be realistic
2. Vocational goal must lead to gainful activity which will lead to termination of benefits

Must Have Specific Savings Goal and/or Planned Disbursements
1. Savings has to be related to occupational goal
2. Must be kept in separate account
3. Disbursements may be used toward room and board only if required to be away from usual place of residence
4. Unusual expenses such as meals and incidentals may be excluded if related to training
5. Source of income or funds immaterial

Must Have Specific Time Period

1. Time frame is mandatory - Up to eighteen months is allowed with a possible eighteen months extension

Must be Current

1. Must be continuous with no time lapses (school vacations, etc. excluded)
2. Must be within time limits as stated

Must be Approved By Social Security Administration

1. SSA/DO has final say
2. SSI recipient must report any changes

Appeal: If plan for self-support is not approved, claimant must be advised of the following:

1. Why plan does not meet SSI requirements
2. Claimant may appeal decision mady be SSA, if he does not agree
3. May consult with VR when devising plan

Income: Parents income is deemed if applicant is under age eighteen years. Parents' income is deemed if "child" betwen 18-20 is resident student, but returns home for vacations. Parents' income can be included in PSS

Income: Earned or Unearned that can be Used in a PSS

Recipient of SSI-CS

If a person who is receiving the total SSI gets a job but in order to be employed needs schooling, training, equipment, tools or an automobile, the person could write up a PSS and if approved would allow part of his/her earned income to accumulate or be disbursed and would not lose any SSI benefits.

Example: If a person is receiving the total SSI payment, and s/he gets a job but needs an automobile with hand controls to get to work. Assume the car with the hand controls cost $2000. Assume the person's job pays $180 a month. The person could write up a PSS and if the plan is approved s/he would not lose any SSI benefits.

The first $65 earned would not be deducted from SSI so a person would not use the first $65 for a PSS. $180-$65 = $135, the $135 a month would be allowed to accumulate or be disbursed for payment of the car.

Recipient of DI-SSI

Recipients of DI and SSI benefits can use part of his/her DI income for a PSS. The DI income allowed to accumulate or be disbursed towards a PSS would depend on the amount of DI income an individual receives. The first $20 of DI income would not be used in a PSS, the remaining DI income can be used for a PSS and that amount would be restored on the individual's SSI check.

Example: Recipient of DI income of $120 and SSI $67.80 = $187.80 a month. The first $20 is not counted against SSI payments, so the first $20 of DI income would not be used in a PSS.

DI income $120
First -20 DI income that is not counted by SSI
DI income $100 that can be used in a PSS.

The DI income used in a PSS would be restored on the individuals SSI check.

Recipient of DI Benefits

Recipients of DI benefits of over $185 a month are not eligible for SSI benefits. If a DI recipient writes up a PSS and if the plan is approved the person will become eligible to receive SSI.

Example: If a person is receiving DI benefits of $220 a month and writes up a PSS to accumulate or be disbursed.

DI income $220
First -20 DI income that is not counted by SSI
DI income $200 that can be used in a PSS

If the total $200 of DI is used in a PSS, the recipient would then be eligible for the total $167.80 SSI benefit for as long as the PSS lasted.

Earned and Unearned Income

All earned and unearned income approved by SSA to be used in a PSS must not be used for any other purpose than was agreed to in the written plan. If the money is spent for something other than agreed upon in the plan, the amounts would be considered current income and would be chargable against SSI payments.

APPLICATION PROCEDURES: Any inquiries concerning the Self-Support Plan should be directed toward your local Social Security Office.

If interested in assistance with preparation of a Plan for Self-Support, contact your local Vocational Rehabilitation office or counselor.

PERMISSIBLE ADDITIONAL EARNINGS: Income earned above the amount agreed upon for the PSS would be deducted from SSI payments $1 for every $2 earned above $65. The first $65 earned is allowed by SSI before deductions.

REASONS FOR TERMINATION: When the time period set for the PSS runs out. When a person abandons the plan. When a person's condition worsens and can't continue with the plan.

NAME OF PROGRAM: Vocational Rehabilitation

SOURCE OF FUNDING: State and Federal appropriations.

ADMINISTRATION: Division of Rehabilitation - Department of Social Services

ELIGIBILITY: Any disabled person residing in Colorado, who, with the provision of certain services might be made employable. If a person's disability would affect him/her from being employed, that person would not be accepted for Vocational Rehabilitation.

BENEFITS: Services Provided by Vocational Rehabilitation

1. Necessary diagnostic examinations and procedures.
2. Necessary medical, surgical, psychiatric and hospital services.
3. Necessary prosthetic devices, such as artificial limbs, hearing aids, etc.
4. Individual counseling and guidance.
5. Vocational training in schools, on the job, by correspondence, or by tutor.
6. Maintenance and transportation during rehabilitation, if necessary.
7. Necessary tools, equipment and licenses.
8. Placement on the right job.
9. Follow-up to make sure the worker and the job are properly matched.

Rehabilitation may mean surgical and hospital care, fitting of an appliance, or a complete program in training to prepare the individual to accept and work in employment within his mental and physical capacities. It may mean only the finding of a suitable job where his physical capacities meet the job requirements.

Vocational Rehabilitation will pay for durable medical equipment that an individual will need, such as, wheel chairs standard or electric, crutches, braces, shoes attached to braces, canes, etc., as long as an individual is a Vocational Rehabilitation recipient.

Physical, psychiatric, psychological examinations, guidance, training and placement are provided as required at no cost to the disabled person.

The cost of all services are assumed by Vocational Rehabilitation to the extent that the disabled person is unable to pay for them from his own funds.

When SSA, Veterans, Workmans Compensation send individuals for Vocational Rehabilitation services these agencies usually pay for the Rehabilitation services. When they don't, Vocational Rehabilitation pays for the services if the person is accepted for Vocational Rehabilitation.

APPLICATION PROCEDURES: Disabled persons should get in touch with the closest Vocational Rehabilitation District Office. Applicant will need his/her Social Security number, birth date, and name and address.

Persons who do not have a Social Security number will have to get one, because all Vocational Rehabilitation recipients records are filed under their Social Security numbers.

PERMISSIBLE ADDITIONAL EARNINGS: The same as whatever benefit program an individual is receiving will allow. (SSA, SSI, AND, RR, W. COMP., etc.)

REASONS FOR TERMINATION: When a person's vocational training for a job is over, or when a person gets a job.

NAME OF PROGRAM: Aid to Dependent Children (ADC - AFDC)

SOURCE OF FUNDING: Federal and State and Cities
54.45% - 25.55% - 20% respectively

ADMINISTRATION: The County Department of Social Services Administers (ADFC) programs.

ELIGIBILITY: Aid to Dependent Children to assist children deprived of parents' support or care, and to prevent family breakdown. The basic requirements for a child to obtain ADC are:

1. The child's family does not have sufficient income to meet basic needs.
2. The child is under 18 years of age or between 18 and 21 years of age if regularly attending school.
3. The child is deprived of his/her parents' support or care by reason of: death of a parent, continued absence of a parent from the home. Physical or mental incapacity of a parent,. Umemployment of a parent.
4. The parent and the child may not own real and personal property in excess of $1000. However, $250 is allowed for each additional child with a maximum of $2000 for a family group. The home is not included as real property.
5. The child must live in the home of the parent or near relative who receives the assistance payment.

BENEFITS: Disabled family provider who is not entitled to Social Security benefits or any other insurance income benefits, is entitled to ADC benefits for her/him-self and his/her family.

One parent, one child, monthly benefit $207.00.
Couple, one child, monthly benefit $213.00.
Couple, two children, monthly benefit $262.00.

These are summer totals, winter totals would be a few dollars more for utilities.

A disabled ADC provider would only receive ADC benefits until s/he was approved for SSI benefits. His/her share would then be sub tracted from from the ADC check and the children would continue to receive their ADC benefits.

A disabled provider of a family who is entitied to SS benefits, but his/her DI benefits do not exceed the maximum ADC assistance, is entitiled to ADC benefits to, and his/her family would be covered by Medicaid.

All families receiving public assistance are eligible for Medicaid Medical Insurance.

APPLICATION PROCEDURES: Persons applying for AFDC assistance should bring rent receipts, birth certificates for themselves and their children. Application forms have to be filled out. The Social Service Department will do a screening on the family, and in about 15 days a case worker will come to the home for an interview and to fill out forms. It takes 30 days from application date to receive AFDC benefits.

PERMISSIBLE ADDITIONAL EARNINGS: If provider of family gets employment the first $30 is disregarded for employment expenses. One-third of his/her salary after the $30 is disregarded. His/her AFDC benefit is subtracted from the other two-thirds salary.

REASONS FOR TERMINATION: Income from employment reaches above the AFDC eligibility.

NAME OF PROGRAM: Aid to the Needy and Disabled (AND)
Home Care Allowance

SOURCE OF FUNDING: State - 80%, Cities and Counties - 20%

ADMINISTRATION: Administered by local Social Services Departments.

ELIGIBILITY: The applicant must be at least 18 years of age. The applicant must be permanently and totally disabled. The applicant must be receiving SSI benefits. The applicant must not own real and personal property having a total value greater than $1000 excluding a house used as a home.

BENEFITS: An individual receiving SSI benefits of $167.80 a month would be eligible for the Colorado Supplemental (AND) check of $17.20. Total monthly income would be $185.00

Home Care Allowance
Only persons receiving SSI benefits are eligible for the AND Home Care Allowance. The most an individual can receive from AND for home care is $217.00 a month.

Needs List
The Social Services Department requires an applicants attendant to make out a needs list, stating all the things the attendant has to do for the applicant in a 24 hour period

Disability Report
The Social Services Department will send the doctor of the applicant medical forms to fill out, stating the applicant's physical disability.

Determining Amount
How much of the $217.00 Home Care Allowance an individual will receive is determined by the needs list and the physical disability report from the applicant's doctor.

One Check
When an individual receives the CS-AND benefit and the AND Home Care Allowance, the two benefits will come in one monthly check.

Example: An individual receiving CS-AND $17.20 and the total of the AND Home Care Allowance, $217.00, would get a monthly check of $234.20.

Time
After an application has been filled out for AND benefits, it can take up to 60 days before the applicant is approved for AND.

APPLICATION PROCEDURES: When a person is eligible for SSI benefits he or she has to apply at his/her local Social Services office, to apply and fill out forms.

PERMISSIBLE ADDITIONAL EARNINGS: $80.00 a month

REASONS FOR TERMINATION: Each dollar a person earns over $80.00 a month is deducted from his/her AND check, so when a person's earnings are over $80.00 are as much as his/her AND check, the person is terminated.

NAME OF PROGRAM: General Assistance-General Medical Assistance

SOURCE OF FUNDING: Financed by the City and County.

ADMINISTRATION: The Social Services Department

ELIGIBILITY: The person must be 18 years of age or over. Must be a resident of City and County. Persons who are unemployable because of personal incapacities, such as physical or mental illness or deformities are not eligible for AND coverage. Persons with dependent children who are temporarily unemployed because of inability to find a job and not being eligible for other Public Assistance Programs. Persons awaiting approval of other Public Assistance Programs.

(Employable childless couples and single persons are not eligible).

BENEFITS: Persons who live in a hotel would receive $50 for rent, $40 for food, total $90 per month.
Persons living in boarding houses, receive $100 a month for room and board.
Persons renting apartment receive $50 for rent and $50 worth of food-stamps per month.
If a person rents an apartment, General Assistance sometimes pays for cooking utensils.
All General Assistance recipients are eligible for medical care at a City or County Hospital.
Social Services will pay for Amb-O-Cab trips to a Doctor's office, dentist's office, and eye doctor's office if the person's case worker arranges the ride.

APPLICATION PROCEDURES: Applicants have to apply at the Social Services Department and have with them a current verification of incapacity from a doctor licensed to practice in the state of Colorado.

PERMISSIBLE ADDITIONAL EARNINGS: None

REASONS FOR TERMINATION: Person gets a job, or is approved for another Public Assistance Program. Duration of the General Assistance is only 6 months.

NAME OF PROGRAM: The Food Stamp Program

SOURCE OF FUNDING: The Department of Agriculture pays for all of the "bonus" coupons a family receives, and for half the cost of operating the program. State and County Department's of Social Services must pay the other half of the operating cost.

ADMINISTRATION: The U.S. Department of Agriculture in cooperation with the State and County Department of Social Services administer the food stamp program.

ELIGIBILITY: Who can receive food stamps? Any household which meets the requirements set by the USDA can receive food stamps. A "household" is a group of people living together who buy and cook their food together and who share all income and expenses.

Most "household" are families, but a house hold can be one person, or a group of unrelated persons and there can be more than one household living in the same house.

BENEFITS: Allowable Monthly Income (After Deductions)

Persons in household.

1	2	3	4	5	6	7	8	9	10
$215	307	433	553	660	787	873	993	1120	1247

Income is all money received by all members of the household. Income includes; earnings, pension, retirement, Social Security and SSI benefits, training allowances, scholarships, and educational loans and grants, child support and alimony payments, public assistance grants, unemployment and strike benefits, and other payments which may be considered as a gain or benefit to the household.

Resources:
Things the households owns, and includes; cash, checking and savings accounts, stocks and bonds, recreational vehicles, and real estate.

Items not counted as a resources are: the home and lot in which the household lives, one vehicle (and any additional vehicles necessary for employment), personal property, household goods, income producing property (rental property, business), etc.

Resource Limitations:
Any household wishing to receive food stamps benefits, cannot have more than:

$1500 worth of resources for a household of one or more persons, or;
$3000 worth of resources for a household of two or more persons with at least one member age 60 or more.

Deductions from Income:

The food stamps program allows certain deductions which are taken from Monthly Gross Income and which include: mandatory deduction (Federal, State and City taxes, FICA, etc), union dues 10% of your gross income not to exceed $30 per month to cover expenses of being employed, medical expenses over $10 per month, educational expenses, child chare if necessary for employment, and shelter costs which exceed 30% of income after the other deductions have been made (shelter cost include; rent, mortgage, taxes, utilities, telephone, etc.).

Household Receiving Public Assistance:

Such as AFDC are eligible for food stamps without regard to income or resources and should contact their caseworker to complete the required affidavit. Households receiving SSI benefits are also eligible without regard to income or resources, but must complete an application form and appear for a face to face interview, at the food stamp office.

Monthly Food Stamp Allotment:

A household participating in the food stamp program receive a certain amount of food stamps a month. The monthly allotment a household receives based on the number of persons in the household.

Monthly Food Stamp Allotment:

Persons in household;

1	2	3	4	5	6	7	8	9	10
$50	92	130	166	198	236	263	298	336	374

Coupons Allotment from January 1 to July 1, 1976.

How Much a Household Pays for Food Stamps:

The price paid for a monthly allotment of food stamps, or the purchase requirement, is based upon the amount of income your household has left after all deductions are made. A household with very low income may receive their food stamps at little or no cost. Other households will pay a certain amount for their food stamps. All households will receive a certain amount of free or "Bonus" food stamps, if they are eligible.

The monthly food stamp allotment is changed every six months (January and July) to reflect the increase in the cost of living.

Income and Expenses:

You must notify the food stamp office of any changes in income, resources or expenses which are more than $25 per month, or which may change your eligibility.

A person moving out of the county or state may obtain a 60 day continuation of their current certification from the food stamp office. This will allow you to continue receiving food stamps in the new county for 60 days without having to re-apply for a new certification.

APPLICATION PROCEDURES: Complete an application form and appear at the food stamp office for an interview. Households receiving Public Assistance are not required to appear for the interview. Persons unable to appear due to illness or disability may request for the interview be made by a home visit, by telephone or by an authorized representative.

A household has to be a resident in the county in which s/he applies for food stamps. Be a citizen of the United States or permanent legal alien.

When Applying for Food Stamps

Take along proof of all income received, such as pay check stubs, pay envelopes, and pension award letters. Proof of expenses, such as rent receipts, utility bills, medical bills, etc., as well as records of checking and savings accounts, tax notices on property, etc.

PERMISSIBLE ADDITIONAL EARNINGS: Earnings of a student under the age 18, loans (except deferred education loans), lump sum payments which are received only once (insurance settlements, etc.).

REASONS FOR TERMINATION: Your income or resources rise above the food stamp level of eligibility.

NAME OF PROGRAM: Railroad Retirement and Survivors Annuities

SOURCE OF FUNDING: Both the employee's and employer's pay taxes on employee's railroad earnings up to the monthly maximum ($1,275 in 1976). The rate employees pay is 5.85 percent, which includes 0.9 percent for Medicare hospital insurance benefits. The tax rate paid by employers is 15.35 percent in 1976.

ADMINISTRATION: The United States Railroad Retirement Board, an agency of the United States Government, administers retirement and survivors annuities.

ELIGIBILITY: To be eligible for Railroad Retirement Annuities, a worker must have completed 10 years (120 months) of railroad service to be eligible for retirement annuities, disability annuities or survivors annuities.

BENEFITS: The amount of annuities an individual will receive, is determined by the worker's average wages and how many years of railroad service s/he has worked.

Full annuity at any age if a worker is unable to do any regular work (total disability).

Full annuity at ages 60-64 or at any age after 20 years of railroad service, if the worker is unable to work at her/his regular job (occupational disability).

A child disabled before age 22, is eligible for annuities on a parents retirement, disability or survivors annuity at any ages. The amount the child will receive is determined by a special formula. (Child age, disability, parents wages and years of service, etc.).

Spouse annuities if s/he has children in her/his care under age 18 or a disabled child in her/his care at any age.

Annuities for children under 18 and unmarried children 18 to 22 if they are full time students.

Railroad Retirement Annuities and Social Security Benefits: When an employee is entitled to both railroad annuities and Social Security benefits. The SSA administration will determine his/her Social Security benefits then turn them over to the Railroad Retirement Board. The Railroad Retirement Board will subtract the amount of the Social Security benefits from the Railroad Retirement annuities.

The Railroad Retirement Board administers the Social Security benefits and Railroad Retirement annuities to the recipients. This was done to avoid over payments.

Employees Without Creditable Service:
Railroad employee's who become disabled or die without creditable railroad service (120 months). The money they had paid into the railroad retirement fund, will be turned over to the SSA and that person or his/her survivors may receive Social Security benefits, if the worker worked long enough for Social Security benefits.

APPLICATION PROCEDURES: To apply for railroad retirement, disability or survivors annuities. A person should apply at the Railroad Retirement Board, If a personal visit is to difficult, write or telephone your nearest Railroad Retirement Board's district office.

A person will need evidences of his/her birth date. A certified copy of a civil or church record made close to the time of his/her birth. Evidences of any military service a person may claim.

An applicant for a disability annuity, is required to submit supporting medical evidence.

A person applying on another person's annuity will need proof of age, marriage or relationship to that person.

If a person has worked under Social Security coverage, an application for a railroad annuity is also an application for any Social Security benefits you are entitled to. The amount of Social Security benefits a person will receive is determined by the SSA but the Railroad Retirement Board (as of January 1, 1976) pays the benefits.

PERMISSIBLE ADDITIONAL EARNINGS: If a worker's annuity is based on disability, s/he can earn up to $200 a month. Annuities will not be paid in any month a person earns more than $200. However, withheld payments may be restored if the person's earnings for the year are less than $2,500. Otherwise, the person is subject to a reduction of one months annuity for each $200 s/he earns over $2,400.

Those restrictions do not apply to disabled widows (or widowers) under age 62 or disabled children over 18. Their earnings are subject to special review. If a disabled person is receiving annuities on another person's annuity, the amounts/he can earn is the same as the SSA.

All earned income should be reported to the Railroad Retirement Board promptly, to avoid overpayment. Failure to do so could involve a penalty charge.

REASONS FOR TERMINATION: A disability annuity stops when the employee recovers from his disability.

A wife's annuity stops if her husband's annuity terminates, she gets divorced, or her annuity was based on caring for a child, and the child is no longer under 18 or disabled.

A widow's annuity stops, if she remarries, if her annuity is based on caring for a child under 18 and the child is no longer under 18 or disabled.

A disabled child, widow or widower receiving annuities on another person's annuity and has a job earning $200 a month, may be terminated if it is determined that the person can do Substantial Gainful work.

NAME OF PROGRAM: Medicare for Recipients of Railroad Annuities

SOURCE OF FUNDING: Same as Medicare under Social Security.

ADMINISTRATION: Travelers Insurance Company administers Medicare for all persons receiving railroad annuities.

ELIGIBILITY: The same as under Social Security.

BENEFITS: The same as under Social Security

APPLICATION PROCEDURES: The same as SSA except a person applying for Medicare who is receiving railroad annuities has to apply at the Railroad Retirement Board.

PERMISSIBLE ADDITIONAL EARNINGS: The same as Railroad retirement, disability or survivors annuities.

REASONS FOR TERMINATION: The same as Railroad retirement, disability or survivors annuities.

NAME OF PROGRAM: Worker's Compensation Insurance

SOURCE OF FUNDING: Employer's with more than five employees pay into the State Compensation Insurance Fund.

Employer's with five or less employees, by law, have to buy Compensation Insurance from private insurance companies.

ADMINISTRATION: Administered by the State of Colorado Worker's Compensation Insurance Fund.

ELIGIBILITY: A worker who is injured while working on the job, at his/her place of employment.

BENEFITS: When an employee is injured at his/her place of employment, the amount of Worker's Compensation Insurance benefits s/he will receive is determined by the amount of his/her weekly wages at the time of injury.

Effective since September 1, 1975, the total-maximum compensation an injured employee can receive per week is $144.13.

Wage of $216.19 per week, qualifies for the Maximum Compensation $144.13).

Medical Maximum:
$20,000 - Facial and bodily disfigurement maximum $2,000

Vocational Rehabilitation:
Charged under the $20,000 medical maximum.
Income maintenance - Up to 52 weeks, (for Vocational Rehabilitation)

Maximum Temporary Partial:
None

Maximum Permanent Partial:
$26,292

How Benefits are Paid:
Permanent total benefits payable to maximum of $144.13 a week.

Permanent Partial Disability; all cases paid at $84 a week until amount settled upon is paid up.

Social Security Disability Benefits:
A worker injured on the job, who cannot return to work because of the injury for 12 months or more, can apply for Disability Insurance benefits. If the worker is entitled to the maximum Disability Insurance benefits, his/her compensation benefits will be cut 50%.

A severely disabled worker can receive Compensation benefits the rest of his/her life, unless there is a settlement made between the worker and State Compensation Insurance.

Fatal Cases:
Funeral Maximum - $1,000
Maximum of $144.13 a week
Life time benefits for widows and widowers

Upon remarriage of widow or widower, a two-year lump sum without discount, less lump sums previously paid, must be paid so such widow or widower.

Social Security Offset: 100 percent offset of benefits to widow or widower and their dependents.

Dependent Children: No weekly sum is payable - minor dependents' benefits are included in the lifetime benefits to widows and widowers.

Minimum Death Benefits:
25% or $36.03 a week maximum.

APPLICATION PRODECURES: A worker's employer files for an injured employee at the State of Colorado Worker's Compensation Insurance Office, within 72 hours, after an employee has been injured.

PERMISSIBLE ADDITIONAL EARNINGS: None

REASONS FOR TERMINATION: A person recovers from disability, or when settlement of disability is paid up.

NAME OF PROGRAM: Section 8 Rent Subsidy (HUD)

SOURCE OF FUNDING: Federal

ADMINISTRATION: Regional and Area Offices of the Department of Housing and Urban Development.

ELIGIBILITY: A family which qualifies as a Lower Income Family under the terms of the Housing and Community Development Act (HCD).

BENEFITS: A family or an individual, may be eligible for rent subsidy if their annual income is below the following income limits:
One person - $7200, Two persons - $9200, Three person - $10,350,
Four persons - $11,500, Five persons - $12,250,
Six persons - $12,950, Seven persons - $13,700 Eight persons - $14,400

Income from all sources received by all members of the household who are not minors are to be included in the Annual Income of the Family. All of the following income must be counted:
The gross amount, before any payroll deductions, of wages, overtime pay and tips.
Social Security Payments, SSI, pension, disability benefits, unemployment benefits, interest, dividends and Public Assistance payments.

If Accepted by the Housing Authority:
You will enter into a lease agreement with the owner and each will assume the regular responsibility of tenant and landlord. The Housing Authority will have to inspect the unit to determine that it meets standards and will have to approve the lease. The landlord must enter the Section VIII Program in order to receive the Section VIII Assistance. If the landlord will not enter the Section VIII Program you will have to move to a living unit where the landlord will enter the Section VIII Program.

Individuals or families will be required to pay 25% of total income after allowances for rent. The Allowances or Deductions for this group are:

1. $300 for each minor.
2. Medical Expenses which exceed 3% of annual income.
3. "Unusual Expenses" defined as the amount paid by the family for the care of minors under 13 years of age or for the care of disabled members of the family, but only where such care is necessary to enable a family member to be gainfully employed, and the deduction may not exceed the income from such employment.

A Very Low-Income family with six or more minors, only has to pay 15% of their total income for rent. Also an individual with unusual medical expenses.

How Long Before Accepted:
How long it takes for an eligible person to receive the Section VIII Assistance is determined by how many persons applied before you. The Government only gives out so many units per area, per year. The number is few compared to the persons who are eligible for the Section VIII Assistance.

APPLICATION PROCEDURES: A person has to apply at their Area Office of the Department of Housing and Urban Development. A person will have to fill out an application form, and give three references. All income sources have to be certified.

To certify income, a person who has a job will have to bring a W-2 Form. Persons receiving SSA, SSI benefits will have to bring such checks to have them photographed. Persons receiving interest, dividends and unemployment benefits will have to give the names and addresses of the place where they receive this income from.

The Housing Authority will investigate all income to certify that your income is correct.

PERMISSIBLE ADDITIONAL EARNINGS: Payments for foster child care, and Relocation Payments made in accordance with the Uniform Relocation Act.

Home Care Allowance and Home Makers Allowance, maybe.

REASONS FOR TERMINATION: When individuals income rises above eligibility.

NAME OF PROGRAM: Medicare Insurance - There are two parts to Medicare Insurance. Medicare Hospital Insurance, sometimes called Part-A. Medicare Medical Insurance, sometimes called Part-B.

SOURCE OF FUNDING: Medicare Hospital Inusrance is funded out of the employees and employers 5.85 SSA wage rates and self-employed people 7.90 rates. Though rates include.90 percent for hospital insurance under Medicare through 1977.

Medicare Medical Insurance is paid by monthly premiums. A person receiving Medicare pays this premium. Monthly premiums are $6.70, beginning July 1, 1976 premiums will be $7.20 per month.

ADMINISTRATION: Medicare is a Federal Government Program, run by the SSA. Medicare payments are handled by private insurance organizations under contract with the government. In Colorado Blue Cross and Blue Shield handle hospital and medical claims.

ELIGIBILITY: People who are 65 and people under 65 who are disabled and have been receiving Disability Insurance benefits for 24 months.

BENEFITS: Medicare's Hospital Insurance (Part-A) can help pay for three kinds of care:

1. Inpatient hospital care; and when medically necessary after a hospital stay.
2. Inpatient care in a skilled nursing facility.
3. Home health care.

There is a limit to how many days of hospital or skilled nursing facility days and how many home health visits Part-A can help pay for in each benefit period. However, your Part-A protection is renewed every time you start a new benefit period. A benefit period starts the first time you enter the hospital. When you have been out of a hospital (or other facility primarily a skilled nursing or rehabilitation service) for 60 days in a row, a new benefit period starts the next time you go into the hospital. There is no limit to the number of benefit periods you can have.

Hospital Inpatient:

Part-A can help pay for inpatient care if conditions are met;

1. A doctor prescribes inpatient care for treatment of an illness or injury.
2. You require the kind of care that can only be provided in a hospital.
3. The hospital is participating in Medicare.
4. The Utilization Review Committee of the hospital does not disapprove your stay.

Hospital Insurance Deductible:
If your stay in a hospital is covered by Medicare, you are responsible for the first $124 in each benefit period. This is called the hospital deductible. Medicare will pay for all other covered services for up to 60 days. If your condition requires that you stay in the hospital longer than 60 days, from the 61st day through the 90th day, Part-A pays for all covered services, except for $31.00 a day. If you ever need more than 90 days inpatient hospital care in a benefit period, you can use your 60 days hospital reserve days.

Hospital Inpatient Reserve Days:
Part-A insurance includes an extra 60 hospital days you can use if you ever have to stay in a hospital more than 90 days in one benefit period. For each reserve day you use, you are responsible for $62.00. Part-A insurance pays the rest of the cost for covered services for each reserve day. Once you use a reserve day you never get it back. Reserve days are not renewed like your 90 hospital days in each benefit period.

Major Services Covered When You Are a Hospital Inpatient:
1. A semiprivate room (2 to 4 beds in a room).
2. All your meals, including special diets.
3. Regular nursing service.
4. Intensive care unit costs.
5. Drugs furnished by the hospital during your stay.
6. Lab tests included in your hospital bill.
7. X-rays and other radiology services, including radiation therapy, billed by the hospital.
8. Medical supplies such as casts, surgical dressing and splints.
9. Use of applicances such as a wheelchair.
10. Operating and recovery room costs.
11. Rehabilitation services, such as physical therapy, occupational therapy, and speech pathology.

Services Not Covered When You Are a Hospital Inpatient:
1. Person convenience items that you request such as a TV, radio, or telephone in your room.
2. Private duty nurses.
3. Any extra charge for a private room, unless you need it for medical reasons.
4. The first 3 pints of blood you receive in a benefit period.

Inpatient Care in a Skilled Nursing Facility:
Part-A insurance can help pay for inpatient care in a participating skilled nursing facility after you have been in a hospital. Part-A can help pay for care in a skilled nursing facility if five conditions are met.

1. You have been in hospital for at least three days in a row before your transfer to the skilled nursing facility.
2. You are transferred because you require care for a condition which was treated in the hospital.
3. You are admitted to the facility within a short time (generally within 14 days) after you leave the hospital.
4. A doctor certifies that you need and actually receive skilled nursing or skilled rehabilitation services on a daily basis.
5. The facilities Utilization Review Committee does not disapprove your stay.

If you leave a nursing facility and are readmitted within 14 days you do not have to have a new three day stay in a hospital in order for your care to be covered.

In each benefit period you have 100 days of inpatient care. Part-A insurance pays for all covered services for the first 20 days you are in a nursing facility, after 20 days Part-A pays for all covered services for the 21st day through the 100th day, except for $15.50 a day.

Major Services Covered When You Are In a Skilled Nursing Facility:

1. A semiprivate room (2 to 4 beds in a room).
2. All your meals including special diets.
3. Regular nursing services.
4. Rehabilitation services, such as physical, occupational and speech therapy.
5. Drugs furnished by the facility during your stay.
6. Medical supplies such as splints and cast.
7. Use of appliances such as a wheelchair.

Home Health Care Under Medicare:

When people are confined to their home because of an illness or injury and need skilled health services only on a part-time basis. These services may be medically necessary, for example after treatment in a hospital or skilled nursing facility, or part-time skilled care provided at home could hlep avoid an inpatient stay.

When Part-A insurance pays for home health visits, six conditions must be met.

1. You were in a qualifying hospital for at least three days in a row.
2. The home health care is for further treatment of a concition which was treated in a hospital or nursing facility.
3. The care you need includes part-time nursing care, physical therapy or speech therapy.
4. You are confined to your home.
5. A doctor determines you need home health care and sets up a home care plan for you within 14 days after your

discharge from the hospital.
6. The home health agency providing services is participating in Medicare.

Under these conditions Part-A insurance can pay the full cost of up to 100 home care visits after the start of one benefit period and before the start of another. Payments for these visits can be made up to a year following your most recent discharge from a hospital or nursing facility.

Home health services Medicare Part-A covers:
1. Part-time skilled nursing care
2. Physical therapy
3. Speech therapy

If you need part-time skilled nursing care, physical therapy, or speech therapy, Medicare can also pay for:
1. Occupational therapy
2. Part-time services of home health aides
3. Medical social services
4. Medical supplies and equipment provided by the agency

Medicare cannot pay for these items:
1. Full-time nursing care at home
2. Drugs and biologicals
3. Meals delivered to your home
4. Homemaker services

When Medicare Medical Insurance (Part-B) Pays For Home Health Care:
Part-B insurance can help pay for up to 100 home health visits in a calendar year. You do not have to have a three day stay in the hospital for Part-B insurance to pay for home health care. But only if four conditions are met:
1. You need part-time skilled nursing care or physical or speech therapy.
2. A doctor determines you need the services and sets up a plan for home health care.
3. You are confined to your home.
4. The home health services agency providing service is participating in Medicare.

Part-B insurance also can pay for home health visits if you have used up the 100 visits covered under Part-A insurance and you need more visits.

After you meet the $60.00 deductible, Part-B insurance pays the full costs for covered home health services in each calendar year. You may be charged only for any non-covered services you receive.

Medicare's Medical Insurance (Part-B):
Part-B insurance can help pay for (1) doctors' services, (2) outpatient hospital care, (3) outpatient physical therapy and speech pathology services, (4) home health care, and (5) many other health services and supplies which are not covered by Medicare's hospital insurance.

Medicare's Medical Insurance Yearly Deductible:
The first $60.00 in covered expenses in each calendar year is called the medical insurance deductible. You need to meet this $60.00 deductible only once in a calendar year. You do not have to meet a seperate deductible for each different kind of covered service you might receive.

Medicare Medical Insurance Covered Doctor's Services:
Part-B insurance can help pay for covered services you receive from your doctor in his office in a hospital, in a skilled nursing facility, in your home, or any other location in the United States.

After you meet the yearly $60.00 deductible, medical insurance will pay 80 percent of the reasonable charge for covered services you receive from your doctor. You have to pay the other 20 percent.

Major Doctor's Services Covered by Medical Insurance:
1. Medical and surgical services
2. Diagnostic test and procedures that are part of your treatment
3. Other services which are ordinarily furnished in the doctors office and included in his bill, such as:
   _X-rays you receive as part of your treatment
   _Services you receive from your doctors office nurse
   _Drugs and biologicals that cannot be self administered
   _Medical supplies
   _Physical therapy and speech pathology services

Major Outpatient Hospital Services Covered by Medical Insurance:
1. Services in an emergency room or outpatient clinic
2. Laboratory test billed by the hospital
3. X-ray and other radiology services billed by the hospital
4. Medical supplies such as splint and casts
5. Drugs and biologicals which cannot be self-administered.

Some Doctor and Outpatient Hospital Services Not Covered By Medical Insurance:
1. Routine physical examinations and test directly related to such exams
2. Eye or ear examinations to prescribe or fit eyeglasses or hearing aids
3. Immunizations (unless required because of an injury or immediate risk of infection
4. Cosmetic surgery unless it is needed because of accidental injury or to improve the functioning of a malformed part of the body
5. Routine foot care

Reasonable Charges:
How "reasonable charges" are determined. The Medicare carrier (Blue Cross and Blue Shield) for your area determines the reasonable charge for covered services and supplies on the

basis of an annual review. New reasonable charges are put into effect about July 1st of each year, based on the actual charges made by physicians and suppliers in your area during the previous calendar year.

The carrier determines the customary charge by each doctor and supplier for each separate service or supply furnished to patients in the previous calendar year. Then, the carrier determines the prevailing charge for each covered service and supply. The prevailing charge is the amount which is high enough to cover the customary charges in three out of four bills submitted in the previous year for each service and supply.

APPLICATION PROCEDURES: When a person under 65 receives medicare insurance. The person has to be disabled. People who have been entitiled to SS-DI benefit checks for two consecutive years. You will receive your Medicare card in the mail. Medicare Hospital Insurance is financed by payroll contributions, so when you receive your Medicare card in the mail, you are covered by Medicare Hospital Insurance.

To receive Medicare Medical Insurance, you have to pay a monthly premium of $7.20 beginning July 1, 1976. There is a card attached to your Medicare card when you get it, for a person to fill out if he wants the Medicare Medical Insurance. All you do is check on the card how you want to pay the premium. There are two ways the premium can be paid, check the box that you would like the premiums deducted from your DI benefit check, or check the box that you would like to be billed for the premium. That's all you do, then drop it in the mail.

If you don't want the Medical insurance, then all you do is nothing. But, if you desire later on that you do want the Medical Insurance, you can only apply for it at the SSA office, and only in the first 3 months of the year. You will have to pay 10% more on your premium for each year that has passed.

REASONS FOR TERMINATION: If you have Medicare because you are disabled, both your hospital and medical insurance protection will end if your entitlement to disability benefits ends before you are 65. Reasons for DI benefits ending, a person recovers from disability, a person is able to work at a substantial gainful job, a person disabled as a child gets married, widow or widower who is receiving DI benefits on another person then gets married.

A person can lose his medical insurance by not paying the premiums.

OTHER SERVICES AND SUPPLIES COVERED BY MEDICARE MEDICAL INSURANCE:

Outpatient Physical Therapy and Speech Pathology:
You may receive services directly from an independently practicing, Medicare-certified physical therapist in his office or in your home if such treatment is prescribed by your doctor. Your medical insurance will pay 80% of the reasonable charges

after the $60.00 yearly deductible, but can pay no more than $80.00 intotal benefits in any one year.

Ambulance Transportation:
Medical insurance can help pay ambulance services, from an accident to the hospital, from your home to a hospital or nursing facility, between hospital and nursing facility, or from a hospital or nursing facility to your home.

Prosthetic Devices:
Medical insurance helps pay for prosthetic devices needed to substitute for an internal body organ. These include heart pacemakers, corrective lenses needed after a cataract operation and colostomy or ileostomy bags and certain related supplies. Medical insurance can also help pay for artificial limbs and eyes, and for arm, leg, back, and neck braces. Orthopedic shoes are covered only when they are part of leg braces.

Durable Medical Equipment:
Medicare medical insurance can help pay for durable medical equipment, such as oxygen equipment, wheelchair, home dialysis system, and other medically necessary equipment that your doctor prescribes for use in your home. You can rent or buy this equipment. Whether you rent or buy, Medicare usually makes payments monthly. If you rent, medical insurance will help pay the reasonable rental charges for as long as the equipment is medically necessary.

Care In a Psychiatric Hospital:
Hospital insurance (Part-A) can help pay for no more than 190 days of care in a participating psychiatric hospital in a persons life time.

In addition, there is a special rule that applies if you are in a participating psychiatric hospital at the time a person's hospital insurance starts. The days a person was an inpatient in the 150 days before the person's hospital insurance started must be subtracted from the days the person could otherwise use in his/her first benefit period for inpatient psychiatric care.

Outpatient Treatment of Mental Illness:
Medical insurance (Part-B) can pay 50% of a Doctors treatment for mental illness up to $500 a year, but cannot pay more than $250 in a calendar year.

Medicare Part-B Mental Illness Treatment Study:
The Medicare Part-B program is conducting a study on the use of outpatient mental health services. In this study, Coloradans entitled to Part-B benefits will be assigned to one of four groups, based upon his/her Health Insurance claim number. During the period October 1, 1976, through December 31, 1978, each of these four groups will be eligible to receive different types of outpatient mental health benefits under Medicare.

Group one mental illness treatment is covered the same as before, 50% of a doctor's fee, Medicare will only pay up to $250 a year. Group four is the best coverage Medicare provides, group four will pay 80% of $500 a year for mental illness treatment. Coverage for groups two and three is more than group one and less than four.

NAME OF PROGRAM: Colorado Medical Assistance Program "Medicaid"

SOURCE OF FUNDING: Matching State and Federal Funds.
Federal - 54.45%
State - 45.55%

ADMINISTRATION: The Colorado Department of Social Services has been designated as the "Single State Agency" charged with the development and general administration of Medicaid in our state. The Department of Social Services has appointed the Blue Cross and Blue Shield of Colorado to serve as its Fiscal Agent for the processing and payment of claims.

ELIGIBILITY: "Categorically Needy" Persons whose income is no more than $175.49 per month. Old Age Pension (OAP), Aid to Dependent Children (ADC & ADCU) Aid to the Blind (AB), Aid to the Needy and Disabled (AND).

BENEFITS: Extent of Inpatient Hospital Services:
All Medicaid recipients admitted to a participating Medicaid hospital may receive inpatient hospital services for as many days as determined medically necessary by the recipient's attending physician, the Colorado Admission Program (CAP) adminstered by the Colorado Foundation for Medical Care, and the State Department.

A Colorado non-participating hospital shall be considered a participating hospital only when the services provided to a Medicaid recipient qualify as emergency services.

For Medicaid recipients who are eligible for Medicare benefits, the inpatient hospital services benefits shall run concurrently with Medicare benefits. When Medicare benefits are exhausted and medical need remains for inpatient hospital services, Medicaid will provide payment for continued inpatient hospital services as a benefit, provided the CAP has certified to the State Department that a continuing medical need exists.

For Medicaid recipients who are eligible for Medicare benefits, Medicaid pays the Medicare hospital and medical insurance deductibles and for the first three pints of blood that Medicare does not pay for, doctor services, medicalequipment, repair of medical equipment and Medicaid will pay the Medicare Medical Insurance Premium.

Outpatient Hospital Services--Medicaid:
Medicaid benefit is provided for outpatient hospital services prescribed by a physician when medically necessary for diagnosis and treatment of illness, or when such services consist of inoculations and immunizations which are normally prescribed for the prevention of illness. In addition, benefit is provided for blood furnished to an Eligible Person on other than an inpatient hospital basis.

the physician should institute a program through the agency since this benefit is subject to certain qualifying regulations. There is no prior inpatient hospital requirement attached to the provision of Home Health services under Medicaid.

Additional benefits:

Corrective spectacle or contact lenses to restore or improve vision following eye surgery for all recipients.

Spectacle lenses only for visual defects discovered as a result of a "screening" (EPSDT) examination for an eligible recipient under age 21.

Rental or purchase of durable medical equipment necessary for treatment, or to improve the functioning of a malformed body member, on prior approval by the State Agency.

Surgically implanted prosthetic devices which artificially replace all or part of an internal body organ furnished on the order or prescription of a physician.

Ambulance or wheel chair car service when the patient's condition precludes other methods of transportation and when ordered by the attending physician.

Oxygen and oxygen therapy equipment.

Nursing Home Care - Levels of Care:

The State Department provides payment for nursing home care in three categories, or levels of care: (1) skilled nursing care, (2) intermediate nursing care, (3) residential care.

Skilled Nursing Care:

Skilled nursing care is available for eligible recipients whose need for such care is certified to be medically necessary by a physician, licensed to practice in the state of Colorado. Such care must be provided in a facility which holds a valid and current license from the Colorado Department of Health as a Nursing Care Facility.

Medical Need for Nursing Home Care:

Payment shall be authorized only for nursing home services which are or is deemed to be medically necessary. Such need must be certified by a physician licensed to practice in the State of Colorado.

Residential Care:

A Residential Care Facility is one which is established, operated and maintained to provide residential accommodations, personal, social and related services to individuals who require supervision in a protective environment because of impaired capacities for self-care.

Professional Services:
Medicaid payments may be made for the following professional services when provided to Eligible Persons by a doctor of medicine or osteopathy:

Surgical services - in the physician's office or the hospital
Anesthesia - administered for a covered surgical procedure
Assistant Surgeon - for designated procedures.
Consultation - for inpatient cases only
Medical Care - in hospital, home, office, nursing home, or elsewhere
Diagnostic Laboratory and X-ray services
Drugs and Biologicals - those which cannot be self-administered
Obstetrical Services - including pre and postnatal care
Family Planning services - benefits not provided for premarital examinations
Physical examinations -- limited to the following:
  Examinations required as a result of a specific sympton or complaint, and which caused report of a medical diagnosis
  Examinations for nursing home placement to receive skilled, intermediate, or residential care.
  Examiniations in connection with the program for the Early and Periodic Screening, Diagnosis, and Treatment (EPSDT) of recipients under age 21.

The EPSDT Program, provides for initial screening and follow-up examinations for eligible recipients under the age of 21. To correct health defects thus discovered, further benefit is provided for various visual, dental, and hearing item and services.

Licensed Doctors of Dental Surgery or Dental Medicine:
Medicaid benefit if surgery is related to the jaw or any structure contiguous to the jaw.

The reduction of a fracture of the jaw or any facial bone.

Licensed Doctors of Podiatry or Surgical Chiropody:
Certain non-routine medical and surgical services provided to an individual in other than a medical institution.

Certain routine and non-routine medical and surgical services provided to an individual who is receiving care in a medical institution.

Home Health Agency Services:
Medicaid provides benefit for certain Home Health Agency Services rendered an Eligible Person under the care of a physician, who establishes the plan of treatment to be followed and certifies as to the necessity for home health services. The attending physician must provide a written plan identifying the type of services required, which must be reviewed periodically with the Home Health Agency. All qualified agencies have been provided the information necessary to effect a home health service plan, and if such is determined applicable

Qualified Auxiliary Personal:
The Medicaid Program allows benefit services provided by qualified auxiliary personal in the employ of a physician, when provided under his direct and personal supervision. Qualified persons would include, nurses (registered or licensed), non-physicians anesthetists, psychologists, technicians (laboratory or X-ray), psychiatric social workers, and therapists--either speech, hearing, or physical.

Psychiatric:
Medicaid covers psychiatric treatments when performed in a physicians office. There is no limit to treatments in a physicians office.

Medicaid covers psychologists (certified or non-certified) when ordered by a physician.

Psychiatric Inpatient Care - General Hospital
In case of an admission for psychiatric care, initially authorized days are limited to the lesser of ten or the approved number of P.A.S. days. Extension days up to a total of five may be granted. When additional inpatient care is still required, the attending physician must arrange for the transfer of the patient to a long-term care facility no later than the fifth day of extension.

Benefit is not provided for readmission for psychiatric care in a general hospital within 60 days of discharge from a previous psychiatric admission to a general hospital.

Benefit is provided for psychiatric care for eligible recipients age 20 and under in Colorado State Hospital and Fort Logan. Extensions, each of 30 days duration, may be authorized by the State Agency upon certification of need by the attending physician.

Medicaid Benefits:
Medicaid pays for benefits on an eligible person, only when a licensed physician treats that person, or when the physician orders and sets up a treatment plan, prescribes drugs, medical equipment, durable medical equipment and repair of durable medical equipment.

Recipient of Social Security Benefits:
If a recipient of Social Security benefits is receiving benefits of more than the State maximum level ($185.00) for public assistance, that person is not entitled to Medicaid benefits, except, when that person has to live in a nursing home. Example: Person receiving $225 Social Security check would sign the check over to the nursing home, if his stay at the nursing home was $500 a month, the nursing home would hold out $25 from hisSocial Security check for his personal needs, and the remaining $200 would to towards paying his monthly bill, the nursing home would bill Medicaid for the remaining $300. That would not entitle him to Medicaid medical benefits.

County Departments of Social Services:
The county department shall be responsible for considering and processing all Spenddown applications.

Be responsible for determining individual eligibility for the Spenddown program.

Over the Counter Drug Medicaid Benefits:

Insulin - Minimum, 4 vials or U-40, U-80, or U-100

Aspirin - Coated or uncoated - Minimum quantity 1000 tablets, cannot be refilled more often than every 90 days.

Stool-Softener - Dioctyl Sulfosuccinate, 100 mg. sodium or calcium forms. Minium of 100 tablets per prescription, cannot be refilled more often than every 90 days.

The three over the counter drugs are benefits for chronic illnesses only.

Catheters - Must be prescription legend (Foley, Foely-Teflon, and Foley-Silastic). Number of catheters per prescription is subject to review and approval by the Division.

Saline Solution and/or Sterile Water - together with prescribed medications for injection, is allowed for injectable use only.

Orthopedic Appliances:
Orthopedic appliances can be a Mediciad benefit if the appliances will make the individual more independent.

The individual's doctor will have to fill out a Physicians Request for Additional Benefits Form. The form would be sent to Doctor Signer for approval.

Very few orthopedic appliances are approved as a Medicaid benefit.

APPLICATION PROCEDURES: Individuals must apply at his/her county Social Service Office. Individuals applying will need I-D's, birth certificates, and medical report from his/her doctor. ADC family applying for Medicaid will also need birth certificates for their children. A case worker will come to the home to fill out the necessary forms.

PERMISSIBLE ADDITIONAL EARNINGS: Same as SSI recipients.

REASONS FOR TERMINATION: A person's income reaches such, that he is no longer eligible.

NAME OF PROGRAM: Spenddown - Medicaid

SOURCE OF FUNDING: Federal - 54.45%, State - 45.55%

ADMINISTRATION: Department of Social Services

ELIGIBILITY: Individuals who meet the SSI definition of an aged, blind, or disabled person, who is not eligible for SSI-CS benefits because their income and/or resources are above the maximums set by the State.

BENEFITS: Spenddown is a program which expands Medicaid coverage to individuals who meet the SSI definition of an aged, blind, or disabled person, but, because of income and/or resources which exceed the State maximum level of income or resources that exceed maximums set by the State are not eligible for Medicaid, unless, their income and/or resources are spent-down.

SSI-CS Requirements Set By The State:

State Maximum Level of Income $185.

State Maximum set for resources is $1000, resources do not include a house used as a home.

Applicant must be 18 or over and be aged, blind or disabled.

Spenddown Base Level:

Using the maximum payment set by the State in December, 1973 ($155) and the maximum resource level for SSI-CS ($1000). An applicant's monthly income would be subtracted by $155, the amount left would be multiplied by six (6 months), and that amount of income would have to be "spent down" by the incurrence of an equal amount of medical expenditures before Medicaid pays medical expenses.

If an applicant has resources worth over $1000, the resources amount would be subtracted by $1000 and the amount left would be added to the income that has to be spent-down.

Eligibility Span:

A person only has a 6 month eligibility span at a time. In order for a person to become Medicaid Eligible s/he has to spenddown excess income and/or resources for medical expenses, such as, medical insurance premiums; cost-sharing liabilities for other government and private health care programs; medical care that is reimbursable by Medicaid under the State plan; these are all medical expenses that can be used to spenddown excess income/resources.

The date excess income/resources has been "spent down" is the date a person becomes Medicaid Eligible, if it is before the 6 month eligibility span runs out. When the Eligibility Span runs out the person is no longer Medicaid Eligible.

Example of Spenddown Amount:

If a person's income was $300 a month, you would take
$300 - $155 = $145 X 6 = $ 870
If the same person had resources worth $2000, you
would take $2000 - $1000 = $1000

Total that would have to be spend down before
Medicaid Eligibility $1870

APPLICATION PROCEDURES: Applicants must apply at the Social Services Department, must produce medical information to determine if the applicant meets SSI-CS disability standards, produce all documents of income and non-exempt resources.

PERMISSIBLE ADDITIONAL EARNINGS: Any amount, but additional earnings would be added to the income spenddown.

REASONS FOR TERMINATION: Eligibility Span is only 6 months for persons living in own residences and 3 months for persons living in a nursing home.

A person can reapply for another eligibility span in the last month of their present eligibility span for redetermination of another Spenddown Eligibility Span.

NAME OF PROGRAM: Medical Indigency

SOURCE OF FUNDING: All State funded

ADMINISTRATION: Hospitals and Health Centers owned by municipalities and counties that have a contract with the Medical Indigent Program to participate in the program.

Denver General and West/Eastside Health Centers are the only medical facilities that participate in the program in the metropolitan area.

ELIGIBILITY: Anyone who has no insurance or has insurance but does not cover the total medical cost.

BENEFITS: Individuals applying for the medical indigent would have to pay little or nothing for their medical care received as an outpatient or an inpatient at the hospital or the health cneters. A person can also receive eye and dental care and glasses. What a person does not have to pay is figured on a pay scale.

A single person whose income is less than $233 a month would not have to pay anything. A person earning between $234 and $271 would have to pay 10% of his medical bill. The pay scale is figured up to $17,000.

The pay scale for a family is figured on income and how many members there are in the family.

Anyone in Colorado can receive medical care at Denver General or the health centers.

APPLICATION PROCEDURES: A person would have to apply at Denver General or West/Eastside Centers. A person would have to prove income and if a person has a job he would have to give the name of his employer.

PERMISSIBLE ADDITIONAL EARNINGS: Any amount.

REASONS FOR TERMINATION: Too much income.

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Alabama
Rhode Island
Maine
New Hampshire
Virginia
North Carolina
Indiana
Iowa
Kansas
Massachusetts
Minnesota
Montana
Nebraska
Illinois
Texas
Vermont
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Ohio
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